DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR QUALITY OPERATING PERMIT

Permit No. 199TVP01 Issue Date: November 1, 2002
Application No. A000199 Expiration Date: November 30, 2007

The Department of Environmental Conservation, under the authority of AS 46.14 and 18 AAC 50, issues an operating permit to the permittee, **Anchorage Sand and Gravel Co. Inc.**, for the operation of the **Klatt Road Facility**.

This permit satisfies the obligation of the owner and operator to obtain an operating permit as set out in AS 46.14.130(b).

As set out in AS 46.14.120(c), the permittee shall comply with the terms and conditions of this operating permit.

All facility-specific terms and conditions of Air Quality Control Permit-to-Operate No. 9521-AA009 have been incorporated into this Operating Permit.

This Operating Permit becomes effective December 1, 2002.

John F. Kuterbach, Manager

Air Permits Program

Table of Contents

List of Abbreviations Used in this Permit

AAC	Alaska Administrative Code
ADEC	Alaska Department of Environmental Conservation
AS	Alaska Statutes
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
C.F.R.	Code of Federal Regulations
CO	Carbon Monoxide
dscf	Dry standard cubic foot
EPA	US Environmental Protection Agency
gr./dscf	grain per dry standard cubic foot (1 pound = 7000 grains)
GPH	gallons per hour
HAPs or HACs	Hazardous Air Pollutants or Hazardous Air Contaminants [*HAPs* or *HACs* as defined in AS 46.14.990(14)]
ID	Source Identification Number
kPa	kiloPascals
MACT	Maximum Achievable Control Technology
MR&R	Monitoring, Recordkeeping, and Reporting
NESHAPs	Federal National Emission Standards for Hazardous Air Pollutants *[NESHAPS* as defined in 40 C.F.R. 61]
NO_X	Nitrogen Oxides
NSPS	Federal New Source Performance Standards [*NSPS* as defined in 40 C.F.R. 60]
O_2	Oxygen
ppm	Parts per million
ppmv	Parts per million by volume
ppmvd	Parts per million by volume dry
PM-10	Particulate Matter less than ten microns in diameter
PS	Performance specification
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
RM	Reference Method
SIC.	Standard Industrial Classification
SO_2	Sulfur dioxide
TPH	Tons per hour
tpy	Tons per year
VOC	volatile organic compound [*VOC* as defined in 18 AAC 50.990(103)]
wt%	weight percent

Section 1. Identification

Names and Addresses

Permittee:	Anchorage Sand and Gravel Co. Inc.
Facility Name:	Klatt Road Facility
Location:	Turnagain Industrial Park, Section 19, Township 12N, Range 3W, Seward Meridian.
Physical Address:	11155 Lang Street Anchorage, AK
Owner:	Anchorage Sand and Gravel Co. Inc. 1040 O'Malley Road Anchorage, AK, 99515
Operator:	Anchorage Sand and Gravel Co. Inc. 1040 O'Malley Road Anchorage, AK, 99515
Permittee's Responsible Official	Steven Lovs
Designated Agent:	Steven Lovs 1040 O'Malley Road Anchorage, AK 99515
Facility and Building Contact:	Mr. Wes VanderMartin Operations Manager 1040 O'Malley Road Anchorage, AK 99515 (907) 349-3333 vandermw@anchsand.com
Fee Contact:	Mr. Wes VanderMartin 1040 O'Malley Road Anchorage, AK 99515

Facility Process Description

SIC Code of the Facility: 2951, 1442, 3273, 3271

[18 AAC 50.350(b)(1), 1/18/97]

Section 2. General Emission Information

[18 AAC 50.350(b)(1), 1/18/97]

Emissions of Regulated Air Contaminants, as provided in the permittee's application:

Facility Classifications:

(1) 18 AAC 50.300(b)(1)(A)

Operating Permit Classifications:

(1) 18 AAC 50.325(b)(3)

Section 3. Source Inventory and Description

[18 AAC 50.350(d)(2) 1/18/97]

Sources listed in Table 1 have specific monitoring, record keeping, or reporting conditions in this permit. Source descriptions and ratings are given for identification purposes only.

Table 1 - Source Inventory

ID	Source Name	Source Description	Rating/size	Installation Date
1	Asphalt Plant & Baghouse Control Device	Allis Chambers/Stansteel Batch Mix Asphalt Plant, Model RM 100A	Asphalt Plant: 375 tons/hr Baghouse: 1,092 bags	June, 1981
2	Recycled Material Crushing Operations	Hazemag Crusher and various other related crushing units.	N/A	1986

Section 4. Fee Requirements

1. **Assessable Emissions.** The permittee shall pay to the department an annual emission fee based on the facility's assessable emissions as assessed by the department. The department will assess fees based on the assessable emission fee rate listed in 18 AAC 50.410(b), for each ton of air contaminants that the facility emits or has the potential to emit in quantities greater than 10 tons per year. The quantity of emissions for which fees will be assessed is the lesser of:

[18 AAC 50.400 – 50.420, 1/18/97]

1.1 the facility's annual rate of emissions projected to occur from July 1 to the following June 30, based upon the actual annual emissions for the most recent calendar year or another 12-month period approved by the department, as demonstrated by:

a. an enforceable test method described in 18 AAC 50.220;

b. material balance calculations;

c. emission factors from EPA's publication AP-42, Vol. I, adopted by reference in 18 AAC 50.035; or

d. other methods and calculations approved by the department; **or**

1.2 the facility's assessable potential to emit (PTE) of 240 tpy (99.2 tons of CO, 90.4 tons of NO_X, 12.8 tons of VOC[1]s, 10.7 tons of PM-10, and 27.5 tons of SO_X).

[18 AAC 50.350(c) & 50.410, 1/18/97]

2. **Assessable Emission Estimates.** The permittee shall submit assessable emissions estimates as follows:

2.1 no later than March 31 of each year, submit an estimate of the facility's assessable emissions to ADEC, Air Permits Program, ATTN: Assessable Emission Estimate, 410 Willoughby Ave., Juneau, AK 99801-1795, including all of the assumptions and calculations used to estimate the assessable emissions in sufficient detail so the department can verify the estimates; or

2.2 if no estimate is received on or before March 31 of each year, emission fees for the next fiscal year will be based on the potential to emit listed in condition 1.2.

[18 AAC 50.350(c) & 50.410, 1/18/97]

[1] The VOC PTE at this facility consists of 10.7 tons per year of Hazardous Air Pollutants and 2.1 tons per year of non-hazardous volatile organic compounds**.**

Section 5. Standard Permit Conditions as listed in General Permit 3

Please note that these are standard conditions taken directly from 18 AAC 50.345.
Condition 11 does not limit the Federal Credible Evidence Rule 62 FR 8314.

3. The permittee must comply with each permit term and condition. Noncompliance with a permit term or condition, except for those terms or conditions designated as not federally enforceable, constitutes a violation of AS 46.14, 18 AAC 50, and the Clean Air Act, and is grounds for:

3.1 an enforcement action,

3.2 permit termination, revocation and reissuance, or modification in accordance with AS 46.14.280, or

3.3 denial of an operating permit renewal application.

[18 AAC 50.345350(b)(3), 1/18/97]
[18 AAC 50.345Ic), 5/3/02]

4. It is not a defense in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with a permit term or condition.

[18 AAC 50.350(b)(3), 1/18/97]
[18 AAC 50.345(d), 5/3/02]

5. Each permit term and condition is independent of the permit as a whole and remains valid regardless of a challenge to any other part of the permit.

[18 AAC 50.350(b)(3), 1/18/97]
[18 AAC 50.345(e), 5/3/02]

6. Compliance with permit terms and conditions is considered to be compliance with those requirements that are:

6.1 included and specifically identified in the permit, or

6.2 determined in writing in the permit to be inapplicable.

[18 AAC 50.350(b)(3), 1/18/97]
[18 AAC 50.345(b), 5/3/02]

7. The permit may be modified, reopened, revoked and reissued, or terminated for cause. A request by the permittee for modification, revocation and reissuance, or termination or a notification of planned changes or anticipated noncompliance does not stay any operating permit condition.

[18 AAC 50.350(b)(3), 1/18/97]
[18 AAC 50.345(f), 5/3/02]

8. The permit does not convey any property rights of any sort, nor any exclusive privilege.

[18 AAC 50.350(b)(3), 1/18/97]
[18 AAC 50.345(g), 5/3/02]

9. The permittee shall allow an officer or employee of the department or an inspector authorized by the department, upon presentation of credentials and at reasonable times with the consent of the owner or operator, to:

9.1 enter upon the premises where a source subject to the operating permit is located or where records required by the permit are kept,

9.2 have access to and copy any records required by the permit,

9.3 inspect any facilities, equipment, practices, or operations regulated by or referenced in the permit, and

9.4 sample or monitor substances or parameters to assure compliance with the permit or other applicable requirements.

[18 AAC 50.350(b)(3), 1/18/97]
[18 AAC 50.345(h), 5/3/02]

10. Information Requests. The permittee shall furnish to the department, within a reasonable time, any information the department requests in writing to determine whether cause exists to modify, revoke and reissue, or terminate the permit or to determine compliance with the permit. Upon request, the permittee shall furnish to the department copies of records required to be kept by the permit. The department may require the permittee to furnish copies of those records directly to the federal administrator.

[18 AAC 50.350(b)(3), 1/18/97]
[18 AAC 50.345(i), 5/3/02]

11. Certification. The permittee shall certify all reports, compliance certifications, or other documents submitted to the department and required under the permit by including the signature of a responsible official for the permitted facility following the statement: "Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete." Excess emission reports must be certified either upon submittal or with an operating report required for the same reporting period. All other reports and other documents must be certified upon submittal. When certifying a compliance certification, the official's signature must be notarized.

[18 AAC 50.205, 50.350(b)(3) & 50.350(i), 1/18/97]
[18 AAC 50.345(j), 5/3/02]

12. Requested Source Tests. In addition to any source testing explicitly required by the permit, the permittee shall conduct source testing as requested by the department to determine compliance with applicable permit requirements.

[18 AAC 50.345(k), 5/3/02]

13. Reference Test Methods. The permittee shall use the applicable test methods set out in 40 C.F.R. Part 60, Appendix A, and 40 C.F.R. Part 61, Appendix B, to ascertain compliance with applicable standards and permit requirements.

[18 AAC 50.040, 7/5/00]
[18 AAC 50.220(c) & 50.350(g), 1/18/97]
[40 C.F.R. 60 & 61, 7/1/99]

Section 6. Additional Title V Standard Conditions, not listed in General Permit 3

14. Test Deadline Extension. The permittee may request an extension to a source test deadline established by the department. The permittee may delay a source test beyond the original deadline only if the extension is approved in writing by the department's appropriate division director or designee.

[18 AAC 50.345(l), 5/3/02]

15. Test Plans. Before conducting any source tests, the permittee shall submit a plan to the department. The plan must include the methods and procedures to be used for sampling, testing, and quality assurance, and must specify how the source will operate during the test and how the permittee will document that operation. The permittee shall submit a complete plan within 60 days after receiving a request under condition 12 and at least 30 days before the scheduled date of any tests.

[18 AAC 50.345(m), 5/3/02]

16. Test Notification. At least 10 days before conducting a source test, the permittee shall give the department written notice of the date and the time the source test will begin.

[18 AAC 50.345(n), 5/3/02]

17. Test Reports. Within 60 days after completing a source test, the permittee shall submit two copies of the results in the format set out in the *Source Test Report Outline*, adopted by reference in 18 AAC 50.030. The permittee shall certify the results in the manner set out in condition 11. If requested in writing by the department, the permittee must provide preliminary results in a shorter period of time specified by the department.

[18 AAC 50.345(o), 5/3/02]

18. Test Exemption. The permittee is not required to comply with conditions 15 through 18 (Test Plans, Test Notifications, Test Reports) when exhaust is observed for visible emissions by smoke readers, except in connection with required particulate testing.

[18 AAC 50.345(a), 5/3/02]

19. Good Air Pollution Control Practices. The permittee shall do the following for Source IDs 1 and 2:

19.1 perform regular maintenance considering the manufacturer's or the operator's maintenance procedures;

19.2 keep records of any maintenance that would have a significant effect on emissions; the records may be kept in electronic format;

19.3 keep a copy of either the manufacturer's or the operator's maintenance procedures.

[18 AAC 50.346(b), 5/3/02]

20. Annual Compliance Certification. Each year by March 31, the permittee shall compile and submit to the department an original and two copies of an annual compliance certification report as follows[2]:

20.1 For each permit term and condition set forth in this permit, including terms and conditions for monitoring, reporting, and recordkeeping:

[18 AAC 50.350(d)(4), 1/18/97]

a. certify the compliance status over the preceding calendar year consistent with the monitoring required by this permit;

b. state whether compliance is intermittent or continuous;

c. briefly describe each method used to determine the compliance status;

d. notarize the responsible official's signature.

[18 AAC 50.345(j), 5/3/02]

20.2 Submit a copy of the report directly to the EPA-Region 10, Office of Air Quality, M/S OAQ-107, 1200 Sixth Avenue, Seattle, WA 98101.

[18 AAC 50.350(j), 1/18/97]

[2] The permittee may use the Annual Compliance Certification Form in Section 12, or a similar document containing the information required in condition 20.

Section 7. Facility Specific Conditions

21. Owner Requested Operating Limit. The permittee shall limit annual production of hot mix asphalt to no more than 400,000 tons per year.

21.1 Monitor, record, and report tons of asphalt produced daily, in accordance with Conditions 36.1b and 53 to53.11.

21.2 Notify the department within 10 working days when production of asphalt exceeds 360,000 tons.

[Letter from AS&G to ADEC, June 7, 2002]
[18 AAC 50.335(g)(2), 5/3/02]
[18 AAC 50.225, 5/3/02]

22. The permittee shall maintain a supply of new replacement bags at the facility equal to or greater than 10% of the number of bags required for the baghouse (Source ID 1).

[AQC Permit 9521-AA009]
[18 AAC 50.350(d)(1)(D), 1/18/97]
[AQC Permit 9521-AA009]
[18 AAC 50.350(d)(1)(D), 1/18/97]

23. The permittee shall notify the Alaska Department of Environmental Conservation, Air and Water Quality Division – Air Permitting, 610 University Avenue, Fairbanks, AK 99709-3643 prior to yearly start-up.

[AQC Permit 9521-AA009]
[18 AAC 50.350(d)(1)(D), 1/18/97]

Section 8. GP#3 - General Permit Conditions

Aggregate Dryer or Drum Mixer

24. Opacity & Particulate Matter Emissions

24.1 A. Do not reduce visibility through the exhaust effluent by more than 20% measured as a six-minute average. B. Monitor effluent and facility operation using the monitoring plan conditions 36.1, 36.2, 37, and 39 - 45. C. Report using conditions 52.2, 53.1,53.8,53.11, and 51.

[18 AAC 50.050(a)(4), 5/26/72; 18 AAC 50.055(a)(4), 1/18.97; 40 C.F.R. 60.92(a)(2), 10/6/75]

24.2 A. Do not emit particulate matter concentrations greater than 0.04 gr/dscf. B. Monitor emissions using monitoring plan conditions 36.1, 39 - 45, 20 and 51. C. Report using conditions 52.2, 53.1, 53.9, 53.11, and 51.

[18 AAC 50.050(b)(5), 5/26/72; 18 AAC 50.055(b)(5), 1/18.97; 40 C.F.R. 60.92(a)(1), 10/6/75]

24.3 A. Do not operate the facility for more than 6 hours in any 24-hour period, if the facility cannot perform a Method 5 source test for particulate emissions within the timeframe stated in the application. In addition, do not operate the facility for more than 30 days in any calendar year.

If subject to this condition:
B. Monitor hours and operating days using condition 36.1a, and
C. Report operating hours and days using condition 53.9.

[18 AAC 50.050(a)(4), (b)(5), 5/26/72; 18 AAC 50.055(a)(4), (b)(5), 1/18.97; 40 C.F.R. 60.92(a)(1), (2), 10/6/75]

24.4 **For facilities using a baghouse**

[40 C.F.R. 60.92(a)(1), (2), 10/6/75]
[18 AAC 50.050(a)(4), (b)(5), 5/26/72; 18 AAC 50.055(a)(4), (b)(5), 1/18.97]

a. A. Inspect the interior of the baghouse and complete required maintenance prior to equipment start-up in a new location or after shutdown periods lasting more than 5 days. Within two days of start-up after relocating the facility and every 30 days of operation at the same location, re-inspect the baghouse. Replace any worn out or damaged bags within 72 hours. B. Monitor using conditions 39 and 40. C. Report any deviations using condition 53.1.

18 AAC 50.055(a)(1), (b)(1) & (3) 1/18/97 and 18 AAC 50.050(a)(1),(b)(1)&(3) 5/26/72

b. A. Operate the baghouse efficiently to control opacity and particulate matter. B. Monitor baghouse operations using conditions 36.1d, 36.1e, 41. C. Report any deviations using conditions 53.1 and 53.9.

18 AAC 50.055(a)(1), (b)(1) & (3) 1/18/97 and 18 AAC 50.050(a)(1),(b)(1)&(3) 5/26/72

c. Inspect every component of the control device before the first operation each season and repair or replace any component that shows signs of deterioration.

18 AAC 50.055(a)(1), (b)(1) & (3) 1/18/97 and 18 AAC 50.050(a)(1),(b)(1)&(3) 5/26/72

24.5 **For facilities using a scrubber:** Inspect every component of the control device before the first operation each season and repair or replace any component that shows signs of deterioration.

18 AAC 50.055(a)(1), (b)(1) & (3) 1/18/97 and 18 AAC 50.050(a)(1),(b)(1)&(3) 5/26/72
[40 C.F.R. 60.92(a)(1), (2), 10/6/75]
[18 AAC 50.050(a)(4), (b)(5), 5/26/72; 18 AAC 50.055(a)(4), (b)(5), 1/18.97]

25. Sulfur-Oxide Emissions

25.1 A. Do not emit sulfur dioxide concentrations greater than 500 parts per million using a three-hour average. B. Monitor emissions and relevant operating parameters using monitoring plan conditions 46 and 47. C. Report compliance using conditions 52.2, 53.2 - 53.4, 53.6 and 53.7.

[18 AAC 50.050(c), 5/26/72; 18 AAC 50.055(c), 1/18.97]

25.2 A. Do not burn fuel oil (or used oil mixed with fuel oil) with a sulfur content greater than 0.50 % by weight. Do not burn fuel oil with a sulfur content greater than 0.075 % by weight while operating in the Sulfur Dioxide Special Protection Area (18 AAC 50.025). B. Monitor using conditions 46 and 47. C. Report using conditions 52.2 and 53.2.

[18 AAC 50.350(e)(2)(C), 1/18.97]

25.3 If used oil generated on-site is burned, do not burn greater than 25% used oil to 75% natural gas. Submit to the department at least one test result from the used oil specification testing with the semi-annual operating report in Condition 53. Report using condition 53.7.

[18 AAC 50.050(c), 5/26/72; 18 AAC 50.055(c), 1/18.97]

Diesel Engines that do not meet EPA's definition of a "nonroad" engine[3] /Insignificant Sources

26. Opacity & Particulate Matter Emissions

26.1 A. Do not reduce visibility through the exhaust effluent by more than 20% for a total of more than three minutes in any one hour. B. Monitor emissions using monitoring plan conditions 50. C. Report using conditions 52.2 and 53.8.

[18 AAC 50.050(a)(1), 5/26/72; 18 AAC 50.055(a)(1), 1/18.97]

26.2 A. Do not emit particulate matter concentrations greater than 0.05 gr/dscf. B. Monitor diesel generators using monitoring plan conditions 40 and 50. C. Report for diesel generators using conditions 52.2, 53.1, 53.11.

[18 AAC 50.050(b)(1), 5/26/72; 18 AAC 50.055(b)(1), 1/18.97]

[3] Nonroad engines are defined in 40 CFR 89.2. See attachment 7 for the definition.

27. Sulfur-Oxide Emissions

27.1 A. Do not emit sulfur dioxide concentrations greater than 500 parts per million. B. Monitor emissions and associated operating parameters using monitoring plan conditions 46 and 47. C. Report using fuel analysis or specification from the fuel supplier using conditions 52.2, 53.2 - 53.4.

[18 AAC 50.050(c), 5/26/72; 18 AAC 50.055(c), 1/18.97]

27.2 A. Do not burn fuel oil (or used oil mixed with fuel oil) with a sulfur content greater than 0.50% by weight. B. Monitor using conditions 46 and 47. C. Report using conditions 52.2 and 53.2.

27.3 A. While operating in the Sulfur Dioxide Special Protection Areas defined in 18 AAC 50.025, the facility may operate engines for purposes other than producing electricity (i.e., operating screw conveyors), but these engines may not burn fuel oil with a sulfur content greater than 0.075% by weight. B. Report fuel sulfur content using fuel analysis or specification from the fuel supplier using condition 52.2. [AS 46.14.215, 6/25/93;]

27.4 While operating in the Sulfur Dioxide Special Protection Areas defined in 18 AAC 50.025, do not use diesel engines for electrical generation. The facility must use high line power for electricity.

[AS 46.14.215, 6/25/9318 AAC 50.050(c), 5/26/72; 18 AAC 50.055(c), 1/18.97]

27.5 If used oil generated on-site is burned, do not burn greater than 25% used oil to 75% natural gas. Submit to the department at least one test result from the used oil specification testing with the semi-annual operating report in Condition 53. Report using condition 53.7.

[18 AAC 50.050(c), 5/26/72; 18 AAC 50.055(c), 1/18.97]

Facility Wide

28. Dust [18 AAC 50.045(d), 1/18/97; 18 AAC 50.050(f), 5/26/72]

28.1 A. Take reasonable precautions[4] to prevent the release of airborne particulate matter from the following:

(i) aggregate piles,

(ii) treated and untreated soil piles,

[4] "Reasonable precautions" for asphalt plants include, but are not limited to the following, as necessary to prevent particulate matter from becoming airborne and leaving the facility boundaries:

- ◊ installation and use of hoods, fans, and dust collectors to enclose and vent dusty materials;
- ◊ other covers and enclosures to prevent generation or release of fugitive dust;
- ◊ cleanup of loose material on work surfaces;
- ◊ minimizing drop distances by adjusting conveyor heights or lowering loader buckets to be in contact with surface of soil or ground before dumping; and
- ◊ application of asphalt, water, or suitable chemicals to prevent generating fugitive dust.

(iii) conveyors and elevators,

(iv) loading locations,

(v) the rotary drum,

(vi) crushers,

(vii) screens,

(viii) baghouse fines discharge,

(ix) vehicle traffic within the facility boundaries, and

(x) any other sources of fugitive dust.

B. Monitor emissions and associated operating parameters using monitoring plan conditions 36.1h, 36.1i, and 36.3.

C. Report using conditions 53.1, 53.10, and 53.11.

28.2 If requested by the department, submit a fugitive dust control plan by a date indicated and comply with the new plan. The monitor and reporting requirements for this plan are included in Condition 28.1 B and C.

29. Operation & Maintenance

[40 C.F.R. 60.11(d), 3/26/87; 18 AAC 50.050(a)(1), (b)(1), 5/26/72; 18 AAC 50.055(a)(1), (b)(1), 1/18.97]

29.1 A. Submit an Operations and Maintenance Plan to the department to illustrate how the facility will be operated and maintained in order to comply with the emission limits as specified in this permit. B. Monitor the facility operations and maintenance using condition 40. C. Report deviations from the plan using condition 53.11.

30. Air Pollution Prohibited. No person may permit any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property.

[18 AAC 50.110]
[18 AAC 50.346(a), 5/3/02]

31. Monitoring, Record Keeping, and Reporting for Air Pollution Prohibited

31.1 If emissions present a potential threat to human health or safety, the permittee shall report any such emissions according to conditions 52.1 and 52.2.

31.2 As soon as practicable after becoming aware of a complaint that is attributable to emissions from the facility, the permittee shall investigate the complaint to identify emissions that the permittee believes have caused or are causing a violation of condition 30.

31.3 The permittee shall initiate and complete corrective action necessary to eliminate any violation identified by a complaint or investigation as soon as practicable if

a. after an investigation because of a complaint or other reason, the permittee believes that emissions from the facility have caused or are causing a violation of condition 30; or

b. the department notifies the permittee that it has found a violation of condition 30.

31.4 The permittee shall keep records of

a. the date, time, and nature of all emissions complaints received;

b. the name of the person or persons that complained, if known;

c. a summary of any investigation, including reasons the permittee does or does not believe the emissions have caused a violation of condition 30; and

d. any corrective actions taken or planned for complaints attributable to emissions from the facility.

31.5 With each facility operating report under conditions 53 to 53.11, the permittee shall include a brief summary report which must include

a. the number of complaints received;

b. the number of times the permittee or the department found corrective action necessary;

c. the number of times action was taken on a complaint within 24 hours; and

d. the status of corrective actions the permittee or department found necessary that were not taken within 24 hours.

31.6 The permittee shall notify the department of a complaint that is attributable to emissions from the facility within 24 hours after receiving the complaint, unless the permittee has initiated corrective action within 24 hours of receiving the complaint.

[18 AAC 50.110]
[18 AAC 50.346(a), 5/3/02]

32. Location ***State-only enforceable*** [AS 46.14.215, 6/25/93]

32.1 Notify the department, using attachment 2, at least 30 days before tentative date of relocating as required by Alaska Statute Section 46.14.215, and follow-up with the exact date before the equipment start-up by letter, fax, telephone, or e-mail.

32.2 The permittee shall send a copy of the relocation/operation form to any affected coastal district prior to the relocation of the plant. [AQC Permit #9521-AA009]

33. Fees [18 AAC 50.410; 1/18/97]

33.1 A. Determine the fuel consumed in the facility using monitoring plan condition 38. B. Report fuel consumption using condition 53.5. C. Calculate the sulfur dioxide emissions using the sulfur dioxide formula listed in Attachment 4.

33.2 Estimate the annual emissions for the period from July 1 to June 30 of the following year. Use the formulas listed in Attachment 4, and submit to the department no later than August 1.

33.3 Pay the annual emission fees in accordance with the permit application using the formulas listed in Attachment 4.

Equipment subject to Subpart OOO (40 CFR 60.670)

Equipment subject to Subpart OOO is at a fixed plant with a cumulative rating of all initial[5] crushers greater than 25 tons per hour; or at a portable plant with greater than 150 tons per hour cumulative ratings. The pieces of equipment affected by the applicable conditions are rock crushers, grinding mills, screening operations, bucket elevators, belt conveyors, bagging operations, storage bins, enclosed truck, or railcar loading stations. Please see N1.1-1.4 for requirements in order to replace parts of equipment subject to Subpart OOO. Only the pieces of equipment installed, reconstructed[6], or modified after August 31, 1983, are subject to Subpart OOO.

34. Emission Points *<u>without</u>* Mechanically Induced Air Flow

Conditions 34.1(A), (B), and (C) apply to emission points at a processing plant that ***do not*** have mechanically induced airflow to capture or exhaust particulate matter. Performance tests are required.

34.1 A. Do not allow emissions to reduce visibility through the exhaust effluent by more than

a. 15 percent opacity from any crusher at which a capture system is not used, or [40 CFR 60.672(c), 8/1/85]

b. 10 percent opacity from each transfer point on a subject belt conveyor or from any other subject source. [40 CFR 60.672(b), 8/1/85]

[5] Initial crushers are defined as crushers that process some rock that has not been previously crushed.
[6] Reconstructed is defined in 40 CFR 60.673.

This condition does not apply to:

- *transferring material from a belt conveyor to a stockpile, or* *[40 CFR 60.671, 8/1/85]*
- *truck dumping into any screening operation, feed hopper, or crusher.* *[40 CFR 60.672(d), 8/1/85]*

B. Monitor operations using Conditions 36.2, 48, and 49.
C. Report operations using Conditions 52.2, 53.1, 53.10 and 51.

34.2 A. At all times, and to the extent practicable, maintain and operate their facility including air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions. B. Monitor using condition 36.2. C. Report using condition 53.1.

[40 CFR 60.11(d), 3/26/87]

34.3 Mark each piece of equipment that is subject to Subpart OOO with the letters "NSPS" that are plainly visible and are at least 3 inches high, or with other clearly identifiable markings. [18 AAC 50.350(d)(3), 1/18/97]

Subpart Kb Storage Tanks

35. Volatile Organic Compounds

[40 CFR 60.116b(a), (b), 4/8/87]

Condition 35.1 applies to *stationary* fuel storage tanks that are:

- Constructed, reconstructed or modified after July 23, 1984; and
- Have a capacity:
  - between 10,000 and 20,000 gallons;
  - between 20,000 and 40,000 gallons, and store fuels that exert an equilibrium partial vapor pressure less than 2.2 psia; or
  - greater than 40,000 gallons and store fuels that exert an equilibrium partial vapor pressure less than 0.5 psia.

Stationary means the tank is not attached to a mobile vehicle or vessel.

35.1 Keep accessible records showing the dimensions of each storage vessel, its capacity, and the calculations used to compute its capacity.

Section 9. Compliance Monitoring Plan

36. Obtain the following records to determine compliance with the permit conditions. Keep these records accessible for five years. [18 AAC 50.350(h), 1/18/97]

36.1 **Daily Records.** (if operating, keep the following records)

[18 AAC 50.350(d)(3), 1/18/97]

a. Date: _____ Start time: Stop time(if applicable):

b. Tons of asphalt produced: _____ tons

c. Maximum hourly production rate: _____ tons/hr

For a facility using a control device:

d. Monitor hourly, and record daily minimum pressure drop across the baghouse: _____ inches of water

e. Monitor hourly, and record daily maximum pressure drop across the baghouse:_____ inches of water

f. Maximum differential pressure drop across the scrubber (gas side): _____ inches of water

g. Minimum scrubber water flow rate: _____ gallons/hr

h. ❑ Yes ❑ No Did the department request a VOC and or dust plan?

If you answered Yes to h, did the facility operation deviate from the dust or VOC control plan?

i. ❑ Yes ❑ No If yes, please explain how and why you deviated from the plan.

_____
_____
_____
_____

_____
Signature

_____ _____
Printed Name Title

36.2 **Deviation from Permit Conditions (as necessary).** Keep a list of all deviations from Conditions 21 - 35. Include: [18 AAC 50.350(d)(3), 1/18/97]

a. The date;

b. The equipment involved;

c. The permit condition;

d. A description of the deviation; and

e. Actions taken to solve the problem.

36.3 **Complaint Logs (as necessary).** Keep a written log of all

[18 AAC 50.350(d)(3), 1/18/97]

a. Air pollution complaints received;

b. Dates of complaints;

c. Investigations to determine the cause of the complaints; and

d. Any actions taken to resolve the complaints.

Periodic Monitoring

[18 AAC 50.350(d)(3), 1/18/97]

37. Conduct visible emission observations in accordance with 40 C.F.R. 60, Appendix A, Method 9, within two days of start-up at a new location, at least once during a 30-day operating period at the same location, and when facility starts up after a shut-down period of more than 5 days. The test should occur when the facility is operating at a load typical of the maximum operation during the reporting period. This requirement does not apply to heaters and insignificant sources. Note the equipment production or operating rate at the time of the Method 9 observation. Method 9 consists of at least 24 readings, one reading every 15 seconds.

38. Record the amount of fuel used at the facility on a semi-annual basis.

39. Keep a maintenance log of all baghouse inspections and bag replacement.

40. Keep a maintenance log of activities performed in accordance with the manufacturer's preventative maintenance plan and the Operations and Maintenance Plan submitted to the department.

Continuous Monitoring

[18 AAC 50.350(d)(3), 1/18/97]

For facilities using a baghouse:

41. Monitor the maximum baghouse exit temperature (EF) and differential pressure across the baghouse. Do not exceed the parameters determined by "manufacturer's data" or source test.

For facilities using a scrubber:

42. Monitor the minimum and maximum differential pressure across the scrubber (inches of water). Do not exceed the parameters determined by "manufacturer's data" or 80-130% of source test.

43. Monitor the water flow rate (gal/min). Maintain at least 80% of the flow used during the source test.

Once in permit

[18 AAC 50.350(d)(3), 1/18/97]
[AQC Permit 9521-AA009]

44. If a source test was not submitted with the application, or a previous source test is not on file with the department, conduct a source test within the first 30 days of operation under this permit. Conduct a particulate matter source test, in accordance with standard conditions 12- 18 within five years of last source test. If the results for the most recent test for the asphalt plant are 0.036 gr/dscf or greater, conduct another source test within one year.

44.1 When conducting a source test, record the information included in Attachment 5, and the following:

a. Fuel type and consumption (gal/hr)

b. Age, type, and loading of bags (days, material, air/cloth ratio)

c. Number of cleaning cycles during tests (cycle setting and duration)

d. Exhaust flow (damper setting)

44.2 If the permittee intends to co-fire with used oil, the test shall include at least three runs firing the maximum amount of used oil anticipated. The source test must be representative of the "typical" facility operation.

Continuously Monitor

45. A. Do not operate the asphalt plant at a capacity greater than 10% above the maximum throughput measured during a source test. B. Monitor using condition 36.1c. C. Report deviations using condition 53.1.

[18 AAC 50.050(a)(4), (b)(5), 5/26/72; 18 AAC 50.055(a)(4), (b)(5), 1/18.97; 40 C.F.R. 60.92(a)(1), (2), 10/6/75]

Fuel & Used Oil Delivery

[18 AAC 50.350(d)(3), 1/18/97]

46. Keep a delivery receipt for each shipment of fuel and used oil delivered to the facility. If using fuel oil other than ASTM D1, D2, or comparable, test each shipment for the fuel oil using the applicable ASTM Method. Acceptable methods include D975-84, D3120-92, D4152-90, D2622-91, and D4294-90. If using ASTM D1, D2, or comparable, keep copies of the fuel delivery records that indicate the ASTM fuel grade as defined in ASTM 396-92.

47. If burning used oil generated off-site, test the sulfur content of each shipment of used oil that is generated off-site and record the quantity of fuel accepted or keep supplier's sulfur content analysis. Test any fuel used to fulfill the blending requirement using ASTM D2880-87 and record the quantity of fuel used in the blend. Supplier certification is adequate as long as blending does not occur. Samples may be collected by the vendor from batches prepared by the local supplier for delivery to permittee's facility, or by supplier for bulk shipment not blended prior to delivery to the permittee's facility.

Subpart OOO

48. Inspect each emission point subject to Condition 34 using Method 9 of 40 C.F.R. 60, Appendix A at the following times: (Use Attachment 1)

48.1 within 2 working days after start-up at each new location;

48.2 within 2 working days after start-up after the processing plant has been shut down for 30-consecutive days; and

48.3 at least once in every 14 days of operation.

[18 AAC 50.350(d)(3), 1/18/97; 40 C.F.R. 60.675(c), 2/4/89]

49. If a performance test was not included with the permit application, conduct a performance test as described by 40 C.F.R. 60.675(b)(1) and (2), within the first 60 days of operation under this permit. A performance test includes a Method 9 to determine visible emissions. Use the form provided in Attachment 1. Follow the requirements for a performance test given in 51.1, 51.3, 51.4, and 51.7. Conduct subsequent performance tests within 5 years of the most recent test.

50. Visible Emissions and Particulate Matter Inspections for diesel engines.(A flow chart contained in ATTACHMENT 8 illustrates this tiered monitoring approach.)

[18 AAC 350(d)(3) 1/18/97]

50.1 **Smoke/No smoke Inspection Period.** Once a day for the first 30 operating days of this permit, observe each engine, boiler, and heater to determine the presence or absence of smoke (a smoke/no-smoke inspection). If smoke, excluding water vapor, is seen during the inspection, do one of the following supplemental actions:

a. Do maintenance to eliminate the smoke, and repeat the smoke/no smoke inspection within 72 operating hours; if no smoke is seen during the required repeat inspection, start a new 30-day inspection period; or,

b. Within 10 calendar days, not operating days, of the initial inspection that showed smoke, do a visible emission inspection that conforms to EPA Method 9 in 40 C.F.R. 60, Appendix A, three times, once every two hours. See condition 50.4 below for more details on the Method 9 test.

50.2 Monthly monitoring

a. If no smoke is seen during the first 30 days of operation during the smoke/no smoke inspection, continue smoke/no smoke inspections on a monthly basis to check for engine or combustion unit degradation.

b. If smoke is seen during any monthly inspection, start a new 30-day smoke/no smoke inspection period or do the Method 9 testing described in condition 50.4 below.

50.3 **How to perform the smoke/no smoke inspection.** For each smoke/no smoke inspection, record the

a. Date,

b. Engine or equipment number,

c. Load,

d. Plume background, and

e. Visible emission observation.

Do all inspections required by this condition at the highest load for that engine or combustion unit expected for the month. If this is not practicable or the test is less than 80% of design load, please attach an explanation.

Exceptions:
The visible emission inspections are not required in a given month for a boiler or heater, if the rated input capacity is less than 1,700,000 Btu/hr.

50.4 **Method 9.** If the facility is not able to eliminate visible emissions through maintenance, then the facility is required to perform an opacity test using EPA Method 9 within 10 calendar days of the initial smoke/no smoke inspection that showed smoke. The opacity test consists of three Method 9 tests, taken with a minimum of two hours in between each test.

a. If the results of each of the three Method 9 tests are zero, then the facility may begin a new 30-day smoke/no smoke inspection as described in section A or perform one Method 9 reading each subsequent month.

b. If the results of each of the three Method 9 readings are greater than zero, but less than 20% opacity, perform one Method 9 reading each subsequent month.

c. If any of the three-minute averages of the method 9 readings are greater than 20%, the facility is in violation of the opacity standard.

d. If at any time the opacity readings are greater than 12% opacity, in addition to the requirements of this section, please see section C concerning particulate emissions.

e. If the required monthly Method 9 opacity reading for three consecutive months is zero, the permittee can continue performing Method 9 readings once per month or perform a 30-day smoke/no smoke inspection as described in condition 50.1 of this monitoring condition. If no smoke is seen during the 30-day test, the permittee may perform monthly smoke/no smoke inspections every month instead of Method 9 readings.

f. For each Method 9 inspection, use the form in Attachment 1 of this permit.

50.5 **Particulate Matter.** If the Method 9 readings required in condition 50.4 are greater than 12%, but less than 20% opacity, then particulate matter emissions may exceed the particulate matter standard. Perform a Method 5 or other EPA-approved method source test (within 30 days of Method 9 reading that exceeded 12%) to determine if the standard is maintained and that the particulate emissions are less than 0.05 gr/dscf. Continue the Method 9 readings as described in condition 50.4. Take Method 9 readings during the particulate matter tests in order to calculate an average opacity that corresponds to the particulate matter emissions. Submit the test results to the department within 30 days of the testing completion.

[18 AAC 350(d)(3) 1/18/97]

51. Performance Tests. (as required by 40 CFR 60.675 conducted as specified in 40 CFR 60.8)

51.1 Perform performance tests within 60 days after achieving the maximum production rate of the equipment subject to a federal standard, but not later than 180 days of initial start-up. This timeframe is for new units only. The department and/or EPA may request additional performance tests at their discretion. Please see condition 44 for required performance testing for existing units. See 40 CFR 60.8(a).

51.2 Conduct and report performance tests as specified in the particular Subpart unless the EPA has approved an alternative testing and reporting. See 40 CFR 60.8(b).

51.3 Performance tests shall occur at the facility's representative operation. Submit information so that the department and/or EPA can determine the facility's representative operation. See 40 CFR 60.8(c).

51.4 Notify the department and EPA at least 30 days prior to the start of the performance tests. See 40 CFR 60.8(d).

51.5 Provide adequate sampling ports at appropriate locations as required by the applicable EPA method. See 40 CFR 60.8(e).

51.6 Perform the performance test using the applicable test method at least 3 separate runs or as specified in their applicable subpart. If one of the three runs are interrupted by circumstances beyond the permittee's control, then the EPA at their discretion may approve averaging only two runs. See 40 CFR 60.8(f).

51.7 The initial opacity (visible emission) performance test must be at least 3 hours (30 six-minute averages) during periods of operation. The opacity standard applies at all times except for start-up, shutdown, and malfunction. See 40 CFR 60.11(b) and (c).

51.8 At all times, and to the extent practicable, maintain and operate their facility including air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions. See 40 CFR 60.11(d).

51.9 Postmark all submittals required by federal standards by the date required by the department and EPA. See 40 CFR 60.19(b).

Section 10. Reporting Requirements

The department requires a facility operator to perform four types of reports: (1) reporting emissions that have the potential to violate a permit condition, (2) semiannual operating reports, (3) notification of replacement of certain equipment, and (4) annual compliance certifications.

52. Excess Emissions Reporting:

52.1 **Potentially Injurious Emissions**. Notify the immediately upon discovery of any emission that has the potential to violate Condition 30, at one of the following numbers:

[18 AAC 50.350(i)(1), 1/18/97]

Central Alaska :	269-7500	Fax:	269-7648
Northern Alaska:	451-2121	Fax:	451-2362
Southeast Alaska:	465-5340	Fax:	465-2237
Outside of normal business hours:		1-800-478-2237	

Fax a completed Notification form (Attachment 6) within 24 hours to the Anchorage Air Quality office at (907) 269-7508.

52.2 **Opacity, Particulate Matter and Fuel Sulfur Violations**. Notify the department within two days of:

[18 AAC 50.350(i)(1), 1/18/97]

a. Completion of a Method 9 inspection showing a violation of a visible emission requirement;

b. Receipt of results of a Method 5 or Method 17 performance test that shows a violation of a particulate matter standard; or

c. Burning any fuel that exceeds 0.50 % fuel sulfur or 0.075 % fuel sulfur in a Sulfur Dioxide Special Protection Area described in 18 AAC 50.025.

52.3 Report all other excess emissions and permit deviations using the Notification Form (Attachment 6)

a. within 30 days of the end of the month in which the emissions or deviation occurs, except as provided in conditions 52.3b and 52.3c below:

b. if a continuous or recurring excess emissions is not corrected within 48 hours of discovery, within 72 hours of discovery unless the department provides written permission to report under 52.3a above; and

c. for failure to monitor, as required in other applicable conditions of this permit.

[18 AAC 50.346(a), 5/3/02]

52.4 Immediate Reporting: Notify the department within two days of a pollution-control equipment breakdown. [18 AAC 50.350(i)(1), 1/18/97]

53. Semiannual Operating Reporting: Submit the following information to the department:

[18 AAC 50.350(d)(3), 18 AAC 50.350(i)(5), 1/18/97]

Submit three copies, including the original, of this semi-annual operating report to:

Alaska Department of Environmental Conservation
Air Permits Program
610 University Avenue
Fairbanks, Alaska 99709

(All reports must be certified in accordance with Condition 11.)

Semiannual Compliance Report

Facility Name _____ Date: _____

A Semiannual Compliance Report from:
(Select the correct operating period)

- ❑ 01/1/___ - 06/30/___ of the current year - Due on **August 1**
- ❑ 07/1/__ - 12/31/___ of the previous year - Due on **February 1**

[18 AAC 50.346(b), 5/3/02]

53.1 R3. Did the facility deviate from any permit requirements or a fugitive dust or VOC control plan?

- ❑ Yes
- ❑ No

If yes, explain (1) how you deviated from the plan, (2) the cause of the deviation, and (3) why it was necessary.

Attach:

(a) Copies of all visible emission reading results.

(b) Copies of all particulate matter performance test reports.

(c) A description of any complaints received, including:

- Date the complaint was received and the date the facility responded,
- Nature of the complaint,
- Results of the investigation, and
- Steps taken to resolve the complaint.

(d) A list of any deviations from permit conditions; include:

- The date or period
- Equipment involved
- The permit condition
- The nature of the deviation
- Actions taken to solve the problem.

53.2 List Fuel Delivery dates and grades:

Dates:	Quantity:	Fuel Grade:	or	Sulfur Content:
_____	_____	_____		_____
_____	_____	_____		_____
_____	_____	_____		_____
_____	_____	_____		_____
_____	_____	_____		_____

53.3 List Off-Site Used Oil Delivery:

Dates:	Quantity:	Sulfur Content:
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

53.4 List Burned Used Oil (generated on-site):

Dates:	Quantity:	Sulfur Content:
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

53.5 List the total amount of fuel used at the facility.

53.6 If you blended fuel to meet the sulfur requirement, how did you ensure your facility blended the amount of used oil burned to achieve a 0.5% Sulfur content by weight or less mix?

53.7 How did you ensure your facility blended the amount of used oil generated on-site to achieve a 1-to-3 mix (25% used oil to 75% fuel oil)?

53.8 Attach copies of the visible emission readings taken at start-up at a new location, within a 30-day period at the same location, and restarting after 5 days of non-operation.

53.9 List the daily asphalt production rate, the total number of operation hours and peak hourly rate, percent fines, and minimum and maximum baghouse pressure drop for each month.

[AQC Permit 951-AA009]

53.10 Provide a copy of any complaints received, the nature of the complaint, and the steps taken to resolve the complaint.

53.11 Report any deviations from the facility's submitted Operations and Maintenance Plan.

Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.

_____
Signature

_____
Printed Name

Section 11. Notification Requirements for NSPS Subpart OOO

Replacing Equipment Used in Crushing and Grinding Built Before August 31, 1983

At your processing plant, equipment that was not constructed, reconstructed, or modified after August 31, 1983, is not subject to Subpart OOO. Replacing certain parts of it with equipment that is the same size or smaller does not make your plant subject to Subpart OOO, unless you replace all sources in a production line, but you must notify EPA and the department of the replacement.

If equipment is replaced with larger equipment, use Condition 55 to report.

54. Notifying the Department and EPA: Replacement of Equipment. Notify the department before replacing the following equipment. In addition to the information listed in Conditions 54.1 - 54.4, give enough detail to identify the replacement equipment. Also list any control device used to reduce particulate matter emissions from the equipment being replaced, and all other sources controlled by that control device.

[40 C.F.R. 60.676(a), 2/14/89; 18 AAC 50.200, 1/18/97]

54.1 Before replacing a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck, or railcar loading station, send the department information describing:

a. the rated capacity (tons/hour) and age of the equipment being replaced, and

b. the rated capacity (tons/hour) of the replacement equipment.

54.2 Before replacing the screening operation, send the department information describing:

a. the total surface area and age of the top screen from the existing screening operation, and

b. the total surface area of the top screen of the replacement.

54.3 Before replacing a conveyor belt, send the department information describing:

a. the width and age of the existing belt, and

b. the width of the replacement belt.

54.4 Before replacing a storage bin, send the department information describing:

a. the rated capacity (tons) and age of the existing storage bins, and

b. the rated capacity (tons) of the replacement storage bins.

54.5 Send notifications for condition 54 to:

a. Director of Emission Standards and Engineering Division
U.S. Environmental Protection Agency, (MD-13)
Research Triangle Park, NC 27711

b. Air Permits Program
Alaska Department of Environmental Conservation
610 University Avenue
Fairbanks, AK 99709

New Equipment Subject to Subpart OOO

55. Notifying the Department and EPA: New, Reconstructed, or Modified Equipment. For a new or modified piece of equipment that becomes subject to Subpart OOO, send the department and EPA Region 10 any of the following information that applies during the life of this permit:

55.1 The anticipated date of initial start-up, postmarked between 30 and 60 days before anticipated start-up.

[40 C.F.R. 60.7(a)(2), 12/13/90; 18 AAC 50.200, 1/18/97]

55.2 The actual date of initial start-up postmarked within 15 days after initial start-up.

[40 C.F.R. 60.7(a)(3), 12/13/90; 18 AAC 50.200, 1/18/97]

55.3 For modification to an existing piece of equipment subject to NSPS Subpart 000, information describing:

a. the precise nature of the change

b. the present and proposed emission control systems

c. the capacity before and after the change

d. the expected completion date.

Postmark 60 days or as soon as practicable before the change.

For this condition:

A modification is a change to the equipment that increases
- *The surface area of an initial screen*
- *The width of a conveyor belt, or*
- *The rated capacity of any other equipment.*

This condition does not apply to

- *Routine maintenance, replacement, and repair*
- *Increase in production rate accomplished without capital expenditure*
- *Increase in hours of operation*
- *Use of alternative raw material if the equipment is already designed to handle that raw material*
- *Addition or pollution control equipment*

[40 C.F.R. 60.7(a)(4), 12/13/90; 18 AAC 50.200, 1/18/97]

55.4 The date of initial Method 9 observations, postmarked not less than 30 days before the date of the observations. [40 C.F.R. 60.7(a)(6), 12/13/90; 18 AAC 50.200, 1/18/97]

Send notifications for condition 55 to:

Laurie Kral
U.S. EPA Region 10
1200 Sixth Avenue, MS OAQ-108
Seattle, WA 98101

Air Permits Program
Alaska Department of Environmental Conservation
610 University Avenue
Fairbanks, AK 99709

Section 12. Annual Compliance Certification Form

Permittee: _____
Facility Name: _____
Certification Period: _____

Condition	Compliance Status	Continuous/Intermittent	Method used to determine compliance
1 & 2	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable (attach explanation)	❝ Continuous ❝ Intermittent	❝ Fees estimates submitted and paid to the department ❝ Other (attach description & documentation)
3 - 8	These conditions place no certification obligation on permittee		
9	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable (attach explanation)	❝ Continuous ❝ Intermittent	❝ Dates access granted, or not requested ❝ Other (attach description & documentation)
10	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ Dates submitted ❝ Other (attach description & documentation)
11	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All reports/documents certified ❝ Dates excess emission reports submitted
12 - 19	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ Dates submitted, or source test requested ❝ Other (attach description & documentation)
21	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept, date department is notified if necessary ❝ Other (attach description & documentation)
22	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ Required number of bags maintained on site. ❝ Other (attach description & documentation)
23	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ Date submitted. ❝ Other (attach description & documentation)
24.1	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
24.2	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
24.3	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)

24.4	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
24.5	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
24.6	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
24.7	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
25.1	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
25.2	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
25.3	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
26.1	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
26.2	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
27.1	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
27.2	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
27.3	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
27.4	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)

28.1	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
28.2	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
29	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
30 & 31	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable (attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
32	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
33.1	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
33.2	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
33.3	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable(attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
34.1	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable (attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
34.2	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable (attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)
35	❝ In Compliance ❝ Not in Compliance ❝ Not Applicable (attach explanation)	❝ Continuous ❝ Intermittent	❝ All records kept ❝ Other (attach description & documentation)

Based on information and belief formed after reasonable inquiry, I certify that the facility meets the qualifying criteria and that the statements and information in and attached to this document are true, accurate, and complete.

_____
Signature

_____ _____
Printed Name Title
State of Alaska, City of _____, Borough of _____

On this _____ day of _____, 19____ before me personally appeared _____, whose identity was proved to me on the basis of satisfactory evidence to be the person whose name is subscribed t this instrument, and acknowledged that he (she) executed the same.

_____
Notary Public My Commission Expires on _____

ATTACHMENT 1 - Visible Emissions Forms

Page 1 of _____

When doing readings: Maintain a distance of at least 15 feet from the emission point; When possible while still conforming to Method 9, select a position to minimize interference between sources; If interference cannot be avoided between sources, use the least stringent opacity standard that applies to any of the sources involved; and If wet dust suppression is used, read the part of the plume where there are no visible emissions caused by water mist.

Certified Observer_____

Company _____

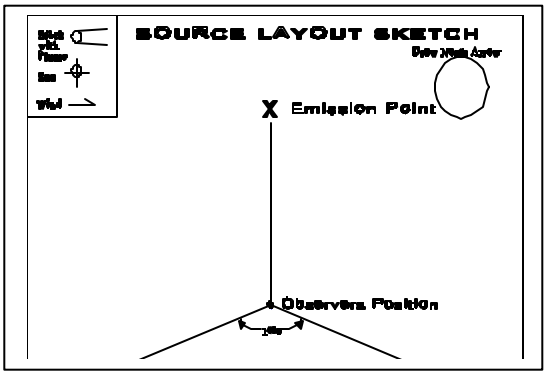
Location _____

Test No. _____ Date

Asphalt Plant: Source _____

Production Rate: Tons/hr

Hrs. of observation: _____



Clock Time	Initial			Final
Observer location Distance to discharge				
Direction from discharge				
Height of observer point				
Background description				
Weather conditions Wind Direction				
Wind speed				
Ambient Temperature				
Relative humidity				
Sky conditions: (clear, overcast, % clouds, etc.)				
Plume description: Color				
Distance visible				
Water droplet plume? (attached or detached?)				
Other information				

Use the procedures specified in 40 C.F.R. 60, Appendix A, Method 9 to perform this observation.

Visible Emissions Observation record
Part 2, Observations

Page ____ of ____

Company _____ Certified Observer_____

Test Number _____ Clock time_____
A minimum reading is 24, every 15 seconds for a total length of 6 minutes

Date:		Visibility reduction every 15 Seconds (Opacity)				Steam Plume (check if applicable)		Comments
Hr	Min	0	15	30	45	Attached	Detached	

Additional information:

_____
Observer Signature

Average Opacity Summary

Set Number	Time Start—End	Opacity	
		Sum	Average

Attachment 2. Portable Facility Relocation/Operation Notification

Name of Firm: _____

Address: _____

Telephone: _____ Contact Person: _____

Current Air Permit No.: _____ Expiration Date: _____

General Wastewater Disposal Permit No. (if applicable): _____

New Plant Location (include site maps): _____

Approximate Startup and Shutdown, Dates, Tons Produced, Maximum Rate (tons per hour):

_____

Asphalt Recycling (tons): _____

Amount of Waste Oil Burned: _____

Wet Scrubber (if applicable) Recirculation Rate: _____

Pond Sizes (primary/secondary)(type of liner): _____

Wastewater Discharge Location (include topo-map): _____

Date(s) of Discharge/Flow Rates (gal/day): _____

Baghouse (if applicable) Date of Last Bag Replacement/Overhaul: _____

Number of Replacement Bags Onsite: _____

Comments: _____

_____

_____

CERTIFICATION

I hereby certify that:

1. The plant will be operated in accordance with all air quality and wastewater discharge permit conditions or subsequent ADEC orders, and in such manner as to avoid impacts on nearby residents in violation of 18 AAC 50.110.

2. All process and control equipment is as described and operated as in the current permits, and there are no known deficiencies that could result in violations or air quality or wastewater discharge requirements.

3. The new location and operation complies with all local ordinances and zoning requirements based on comprehensive land use or coastal zone management plans.

Signature:_____ Printed Name:_____

Title:_____ Telephone:_____

Attachment 3. Citation Table[7]

Condition Nos.	Required By	Federal Citation	Incorporated by reference in	Approved SIP Citation	Current State Regulation
3 – 11	18 AAC 50.350(b)(3)				18 AAC 50.345(a)
24	18 AAC 50.350(d)(1)(C) 18 AAC 50.350(d)(3)				18 AAC 50.055(a)(4) 18 AAC 50.055(b)(5)
	18 AAC 50.350(d)(1)(A) 18 AAC 50.350(d)(3)	40 C.F.R. 52.75	18 AAC 50.040(e)	18 AAC 50.050(a)(4) 18 AAC 50.050(b)(5)	
	18 AAC 50.350(d)(1)(A) 18 AAC 50.350(d)(3)	40 C.F.R. 60.92	18 AAC 50.040(a)		
25.1 **25.3**	18 AAC 50.350(d)(1)(C) 18 AAC 50.350(d)(3)				18 AAC 50.055(c)
	18 AAC 50.350(d)(1)(A) 18 AAC 50.350(d)(3)	40 C.F.R. 52.75	18 AAC 50.040(e)	18 AAC 50.050(c)	
25.2	18 AAC 50.350(e)(2)(A)				
26.1 **26.2**	18 AAC 50.350(d)(1)(C) 18 AAC 50.350(d)(3)				18 AAC 50.055(a)(1) 18 AAC 50.055(b)(1)
	18 AAC 50.350(d)(1)(A) 18 AAC 50.350(d)(3)	40 C.F.R. 52.75	18 AAC 50.040(e)	18 AAC 50.050(a)(1) 18 AAC 50.050(b)(1)	
27	18 AAC 50.350(e)(2)(A)				
	18 AAC 50.350(d)(1)(C) 18 AAC 50.350(d)(3)				18 AAC 50.055(c)
	18 AAC 50.350(d)(1)(A) 18 AAC 50.350(d)(3)	40 C.F.R. 52.75	18 AAC 50.040(e)	18 AAC 50.050(c)	
28	18 AAC 50.350(f)(3)				18 AAC 50.045(d)
	18 AAC 50.350(d)(1)(A) 18 AAC 50.350(d)(3)	40 C.F.R. 52.75	18 AAC 50.040(e)	18 AAC 50.050(f)	
29	18 AAC 50.350(d)(1)(C) 18 AAC 50.350(d)(3)				18 AAC 50.055(a)(1) 18 AAC 50.055(b)(1)
	18 AAC 50.350(d)(1)(A) 18 AAC 50.350(d)(3)	40 C.F.R. 52.75	18 AAC 50.040(e)	18 AAC 50.050(a)(1) 18 AAC 50.050(b)(1)	
30, 31	18 AAC 50.350(f)(3	40 C.F.R. 52.75	18 AAC 50.040(e)	18 AAC 50.110	18 AAC 50.110
32	18 AAC 50.350(f)(3)				AS 46.14.215
33	18 AAC 50.350(c)				18 AAC 50.410(a) 18 AAC 50 420(a)
34	18 AAC 50.350(d)(1)(A) 18 AAC 50.350(d)(3)	40 C.F.R. 60.672(b), (c)	18 AAC 50.040(a)(2)(FF)		
35	18 AAC 50.350(d)(1)(A) 18 AAC 50.350(d)(3)	40 C.F.R. 60.116b(a), (b)	18 AAC 50.040(a)(2)(M)		18 AAC 50.055(a)(1)
35 – 46	18 AAC 50.350(d)(3) 18 AAC 50.350(g) 18 AAC 50.350(h)				
47 **48** **49**	18 AAC 50.350(d)(1)(A) 18 AAC 50.350(d)(3)	40 C.F.R. 60.675(b), (c)	18 AAC 50.040(a)(2)(FF)		
50	18 AAC 50.350(d)(1)(A) 18 AAC 50.350(d)(3)	40 C.F.R. 60.8 40 C.F.R. 60.11 40 C.F.R. 60.19	18 AAC 50.040(a)(1)		
51 - 53.11	18 AAC 50.350(d)(3) 18 AAC 50.350(i)				
56	18 AAC 50.350(d)(1)(A) 18 AAC 50.350(d)(3) 18 AAC 50.350(i)	40 C.F.R. 60.676(a)	18 AAC 50.040(a)(2)(FF)		
	18 AAC 50.350(f)(3)				18 AAC 50.200
57	18 AAC 50.350(d)(1)(A) 18 AAC 50.350(d)(3) 18 AAC 50.350(i)	40 C.F.R. 60.7	18 AAC 50.040(a)(1)		
	18 AAC 50.350(f)(3)				18 AAC 50.200

[7] This table includes citations for those conditions in the permit that have used the condition language from the GP3. All other conditions include the appropriate citations found below the condition language throughout the permit.

Attachment 4: Emission Fee Calculations

For the Period July 1 of the previous year to June 30 of the current year. Emission fees are due no later than August 1 of the current year.
NO_X TPY (A) = tons of asphalt produced multiplied by
0.000085 for diesel-fired batch mix 0.0000125 for nat gas-fired batch mix **0.0000375 for diesel-fired drum mix 0.000015 for nat gas-fired drum mix**
CO TPY (B) = tons of asphalt produced multiplied by
0.0000345 for diesel-fired batch mix 0.00017 for nat gas-fired batch mix **0.000018 for diesel-fired drum mix 0.000028 for nat gas-fired drum mix**
NO_X TPY (C1) from diesel generators Multiply kW hours by 0.000020786 = C1
CO TPY (C2) from diesel generators Multiply kW hours by 0.000004479 = C2
SO_2 TPY (D) = gals of diesel burned for the year multiplied by 0.0000355
Determine Total NO_X A + C1 = X Determine Total CO B + C2 = Y
If either X or Y or D is less than 10 tons do not include in calculation below.
NO_X (X) + CO (Y) + SO_2 (D) = Total emissions in tons per year (TPY)
Total emissions (TPY) x $5.07 = Emission Fee in $

ATTACHMENT 5

Continuously monitor the following parameters and record the average value

- ❑ the asphalt production rate: _____ tons/hour
- ❑ the fines percentage _____ (-200 mesh
- ❑ Method 9 readings during the Method 5 testing

For a facility using a baghouse:

- ❑ the baghouse exit temperature: _____ EF
- ❑ the pressure drop across the baghouse: _____ inches of water

For a facility using a scrubber:

- ❑ the pressure drop across the scrubber: _____ inches of water
- ❑ water flow rate: _____ gallons/minute

- ❑ particulate control: _____ gallons/minute
- ❑ the fines percentage _____ (-200 mesh)

Obtain the following:
For a facility using a scrubber, record the following parameters:

- ❑ pond size: _____
- ❑ pond depth: _____
- ❑ type of liner used: _____
- ❑ is the water recycled ❑ Yes ❑ No
  makeup water flow rate: _____ gallons/hr

ATTACHMENT 6: Notification Form

Fax this form to: (907) 269-7508 Telephone: (907) 269-8888

Company Name

Facility Name

Reason for notification:

❑ **Excess Emissions**
If you checked this box
Fill out section 1

❑ **Other Deviation from Permit Condition**
If you checked this box
fill out section 2

When did you discover the Excess Emissions or Other Deviation:
Date:__/__/__ Time:__:__

Section 1. Excess Emissions

(a) Event Information (Use 24-hour clock)**:**

	START Time**:** (hr:min):	**END** Time:	**Duration**
Date: _____	_____:_____	_____:_____	_____:_____
Date: _____	_____:_____	_____:_____	_____:_____
		Total:	_____:_____

(b) Cause of Event (Check all that apply)**:**

❑ START UP ❑ UPSET CONDITION ❑ CONTROL EQUIPMENT
❑ SHUT DOWN ❑ SCHEDULED MAINTENANCE ❑ OTHER _____

Attach a detailed description of what happened, including the parameters or operating conditions exceeded.

(c) Sources Involved:

Identify each emission source involved in the event, using the same identification number and name as in the permit. List any control device or monitoring system affected by the event. Attach additional sheets as necessary.

Source ID No.	Source Name	Description	Control Device
_____	_____	_____	_____
_____	_____	_____	_____

(d) Emission Limit Potentially Exceeded

Identify each emission standard potentially exceeded during the event. Attach a list of ALL known or suspected injuries or health impacts. Identify what observation or data prompted this report. Attach additional sheets as necessary.

Permit Condition	Limit	Emissions Observed
_____	_____	_____
_____	_____	_____

(e) Excess Emission Reduction:

Attach a description of the measures taken to minimize and/or control emissions during the event.

(f) Corrective Actions:

Attach a description of corrective actions taken to restore the system to normal operation and to minimize or eliminate chances of a recurrence.

(g) Unavoidable Emissions:

Do you intend to assert that these excess emissions were unavoidable?

❑ YES ❑ NO

Do you intend to assert the affirmative defense of 18 AAC 50.235?

❑ YES ❑ NO

Section 2. Other Permit Deviations

(a) Sources Involved:

Identify each emission source involved in the event, using the same identification number and name as in the permit. List any control device or monitoring system affected by the event. Attach additional sheets as necessary.

Source ID No.	Source Name	Description	Control Device

(b) Permit Condition Deviation:

Identify each permit condition deviation or potential deviation. Attach additional sheets as necessary.

Permit Condition	Potential Deviation

(c) Corrective Actions:

Attach a description of actions taken to correct the deviation or potential deviation and to prevent recurrence.

Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.

Printed Name:

Signature: Date

ATTACHMENT 7

[Code of Federal Regulations] [Revised as of July 1, 1997]
From the U.S. Government Printing Office via GPO Access
[CITE: 40CFR89.2]

TITLE 40--PROTECTION OF ENVIRONMENT
CHAPTER I--ENVIRONMENTAL PROTECTION AGENCY

PART 89--CONTROL OF EMISSIONS FROM NEW AND IN-USE NONROAD ENGINES--
Table of Contents

Subpart A--General

Sec. 89.2 Definitions.

The following definitions apply to part 89. All terms not defined herein have the meaning given them in the Act.

Nonroad compression-ignition engine means a nonroad engine which utilizes the compression-ignition combustion cycle.

Nonroad engine means:

(1) Except as discussed in paragraph (2) of this definition, a nonroad engine is any internal combustion engine:

(i) in or on a piece of equipment that is self-propelled or serves a dual purpose by both propelling itself and performing another function (such as garden tractors, off-highway mobile cranes and bulldozers); or

(ii) in or on a piece of equipment that is intended to be propelled while performing its function (such as lawnmowers and string trimmers); or

(iii) that, by itself or in or on a piece of equipment, is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform.

(2) An internal combustion engine is not a nonroad engine if:

(i) the engine is used to propel a motor vehicle or a vehicle used solely for competition, or is subject to standards promulgated under section 202 of the Act; or

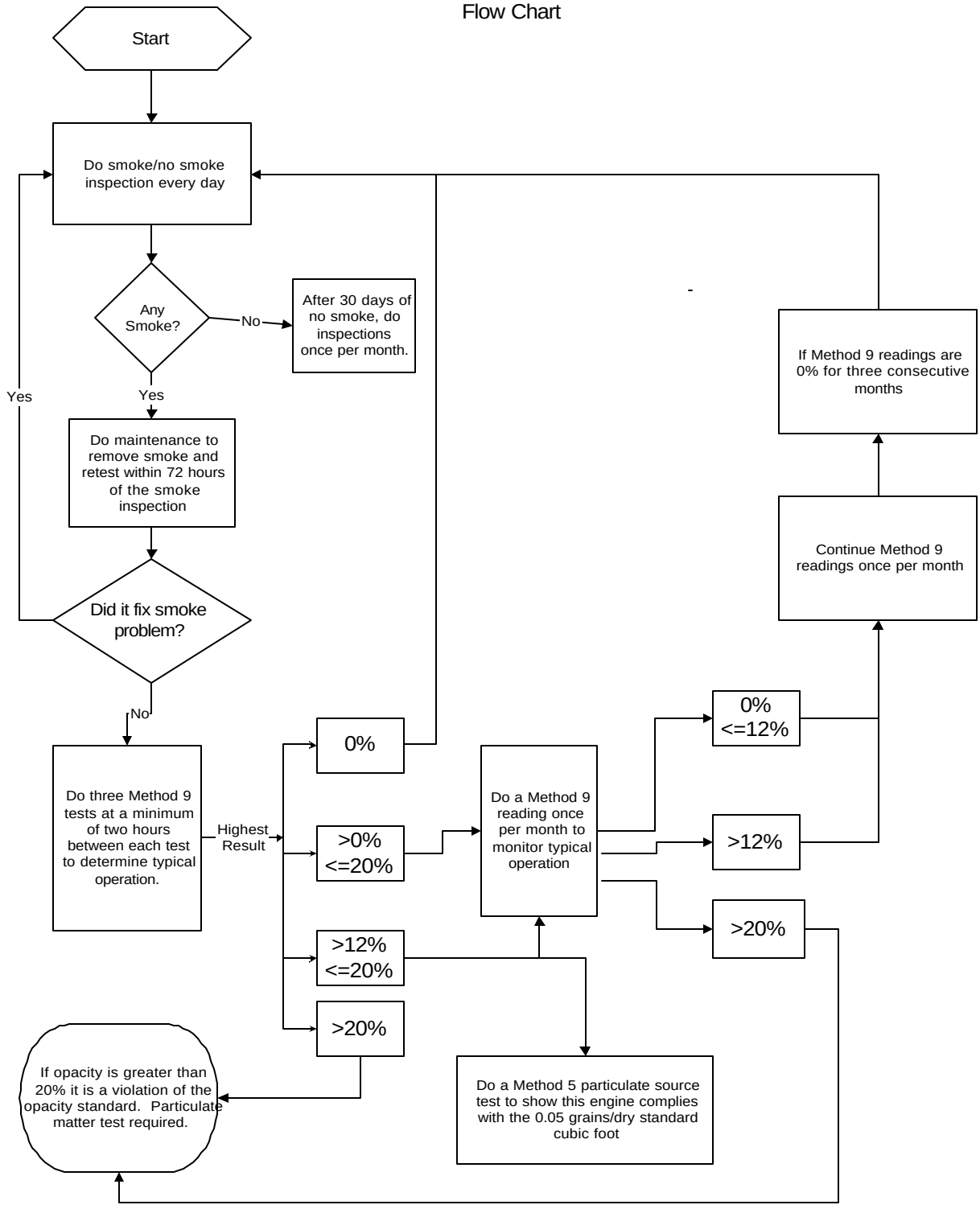
(ii) the engine is regulated by a federal New Source Performance Standard promulgated under section 111 of the Act; or

(iii) the engine otherwise included in paragraph (1)(iii) of this definition remains or will remain at a location for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. Any engine (or engines) that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period. An engine located at a seasonal source is an engine that remains at a seasonal source during the full annual operating period of the seasonal source. A seasonal source is a stationary source that remains in a single location on a permanent basis (i.e., at least two years) and that operates at that single location approximately three months (or more) each year. This paragraph does not apply to an engine after the engine is removed from the location.

[59 FR 31335, June 17, 1994, as amended at 61 FR 52102, Oct. 4, 1996]

ATTACHMENT 8

Visibility and Particulate Monitoring
Flow Chart



Alaska Department of Environmental Conservation

Air Permits Program

November 1, 2002

Anchorage Sand and Gravel Co. Inc.

Klatt Road Facility

STATEMENT OF BASIS

of the terms and conditions for

Permit No. 199TVP01

Prepared by Christian Beaudrie

INTRODUCTION

This document sets forth the legal and factual basis for the terms and conditions of Operating Permit No. 199TVP01.

FACILITY IDENTIFICATION

Section 1 contains information on the facility as provided in the title V permit application.

The facility is owned and operated by Anchorage Sand and Gravel Co. Inc., and Anchorage Sand and Gravel Co. Inc is the permittee for the facility's operating permit.

The AS&G Klatt Road facility is comprised of several distinct types of operations including Asphalt Plant, Sand and Gravel Operations, Concrete Mixing, Concrete Block Manufacturing.

SOURCE INVENTORY AND DESCRIPTION

Table 1 contains information on the sources at the facility as provided in the application. Table 1 describes the sources regulated by the permit. The table is provided for information and identification purposes only. Specifically, the source rating/size provided in the table is not intended to create an enforceable limit.

The asphalt plant has the Standard Industrial Classification (SIC) code of 2951, the sand and gravel operations have SIC code 1442, the concrete mixing has SIC code 3273, and concrete block manufacturing has SIC code 3271.

The Asphalt Plant includes the storage and feeding of raw aggregates through a conveyor system to a counter-current rotary drum dryer with a primary dust collector and a baghouse control device for particulate matter removal. A natural gas fired burner is used to heat the aggregate. The heated aggregate is then fed into the batch plant and mixed with asphalt cement in a pug mill to form asphalt concrete, which is stored in silos that are heated by electricity. A Hazemag crusher is also in use in the Asphalt Plant operation.

The Sand and Gravel Operation involves the unloading of mixed sand and gravel from a train onto a conveyor belt where the sand and gravel is then transferred to the primary crusher. The crushed sand and gravel is then conveyed to a storage pile and sold or transported to the secondary crushing and screening area to make other products. The secondary crushing and screening area consists of conveying the sand and gravel through a number of hoppers, crushers, and screens and each type of product is stored in separate piles. Fugitive dust emissions occur throughout the processing and storage operation and dust is also created from vehicle travel on unpaved roads.

The Concrete Plant produces Portland cement concrete composed of water, cement, sand, and coarse aggregates. The cement is transported to the plant by truck, and a baghouse control device controls the unloading area. The cement is pneumatically transported to the concrete plant where it is mixed with other concrete ingredients.

The block plant manufactures concrete blocks for use in construction activities. The concrete is mixed in a manner similar to that at the concrete plant and then the concrete is pressed into blocks of desired size. The cement used to make the concrete mix is pneumatically transported to the block plant and a baghouse control device located at the block plant controls the transfer.

Significant equipment and emissions sources at the Klatt Road Facility consists of the Asphalt Plant operation, which commenced operation in June of 1981, a Hazemag crushing operation which commenced operation in 1986, and fugitive dust emissions from conveying, storing, transporting, crushing, mixing, and drying operations, as well as from vehicle travel on unpaved roadways.

EMISSIONS

Table A contains emission information as provided in the application. A summary of the potential to emit (PTE)[8] from the Klatt Road Facility is shown in the table below.

Table A - Emissions Summary, in Tons Per Year (tpy)

Pollutant	NO_X	CO	PM-10	SO_2	VOCs (HAPs)	Total
PTE	90.4	99.2	10.7	27.5	12.8 (10.7)	240.4
Assessable PTE	90.4	99.2	10.7	27.5	12.8 (10.7)	240.4

The assessable PTE listed under condition 1.2 is the sum of the emissions of each individual regulated air contaminant for which the facility has the potential to emit quantities greater than 10 tpy.

The assessable PTE for the Klatt Road facility were provided in the Title V permit application and were recalculated using updated AP-42 emission factors.

BASIS FOR REQUIRING AN OPERATING PERMIT

Section 2 includes a description of the regulatory classifications of the Klatt Road Facility. This facility is operating under an owner requested limit in accordance with 18 AAC 50.335(g)(2), to avoid classification as a Prevention of Significant Deterioration (PSD) Major Facility as defined in 18 AAC 50.300(c), and 18 AAC 50.300(d) for carbon monoxide within the Municipality of Anchorage non-attainment area for carbon monoxide. This facility requires an operating permit under 18 AAC 50.325(b)(3) because it contains sources subject to federal NSPS standards adopted by reference in 18 AAC 50.040(a) – (c).

[8] *Potential to Emit or PTE* means the maximum quantity of a release of an air contaminant, considering a facility's physical or operational design, based on continual operation of all sources with the facility for 24 hours a day, 365 days a year, reduced by the effect of pollution control equipment and approved state or federal limitations on the capacity of the facility's sources or the facility to emit an air contaminant, including the limitations such a restrictions on hours of rate of operation and type or amount of material combusted, stored, or processed...as defined in AS 46.14.990(21), effective 1/18/97.

Alaska regulations require operating permit applications to include identification of "regulated sources." As applied to the Klatt Road Facility, the state regulations require a description of:

⇒ Each source regulated by a standard in 18 AAC 50.055, Industrial Processes and Fuel Burning Equipment, under18 AAC 50.335(e)(4)(C);
⇒ Each source subject to a standard adopted by reference in 18 AAC 50.040 under 18 AAC 50.335(e)(2); and
⇒ Sources subject to requirements in an existing department permit 18 AAC 50.335(e)(5).

The emission sources at the Klatt Road Facility classified as "regulated sources" according to the above department regulations are listed in Table 1 - Source Inventory of Operating Permit No. 199TVP01.

CURRENT AIR QUALITY PERMITS

Previous Air Quality Permit to Operate

The most recent permit issued for this facility is permit-to-operate number 9521-AA009. This permit-to-operate includes all construction authorizations issued through December 11, 1995, since it was issued before January 18, 1997. All facility-specific requirements established in this previous permit are included in the new operating permit as described in Table B

Construction Permits

No construction permits have been issued for this facility after January 18, 1997 (the effective date of the new divided operating and construction-permitting program).

Title V Operating Permit Application History

The owner or operator submitted an application on November 20, 1997.

Note: The language of General Permit 3 has been used in this permit as requested by the permittee. This language is used to maintain consistency between permits issued to similar operations under the GP3 and the Klatt Road Facility permit. This permit is a facility-specific Title V permit, valid for 5 years from the date of issuance.

COMPLIANCE HISTORY

The facility has operated at its current location since June 1981. Review of the permit files for this facility, which includes the past inspection reports indicate a facility generally operating in compliance with its operating permit, with the following exception. This facility should have gone through PSD review in 1981 and 1986. The permittee has recently taken measures to bring the facility into compliance with state and federal requirements. An Owner Requested Limit has been requested to limit the amount of asphalt material processed at the facility thereby reducing the facilities potential to emit below PSD thresholds.

FACILITY-SPECIFIC REQUIREMENTS CARRIED FORWARD

State of Alaska regulations in 18 AAC 50.350(d)(1)(D) require that an operating permit include each facility-specific requirement established in a prior construction permit. Table C below lists the construction permit condition that established a requirement in Construction Permit No. 9521-AA009 and the new condition in Operating Permit No. 199TVP01 that carries the old requirement into the new permit.

Table B – Comparison of Pre-January 18, 1997 Permit No. 9521-AA009 Conditions to Operating Permit No. 199TVP01 Conditions [9]

Permit No. 9521-AA009 Condition number	Description of Requirement	Permit No. 199TVP01 Condition Number	How condition was revised
1	Comply with ambient air quality standards	None	Now required only for construction permits.
2	Comply with most stringent emission standards, limits, & specifications	Conditions 3 through 35	Emission limits unchanged and now listed as conditions
3	Provide optimum control of emission	19	Same information, different format
4	Permittee shall not operate asphalt plant at a capacity greater than 375 tons per hour.	45	This condition requires that the asphalt plant not operate at a capacity greater than 10% above the max throughput measured during a source test. This requirement is similar to that found in Permit No. 9521-AA009, however it allows for the same flexibility that is granted to permittees operating under General Permit 3. This new condition also updates the requirement so that the most recent source test is used.
5	Permittee shall install manometers for measuring pressure drop across the baghouse.	41 and 24.4 - 24.4c	These conditions reflect the same requirements as found in condition 5 of the previous permit. .

[9] This table does not include all standard and general conditions

Permit No. 9521-AA009 Condition number	Description of Requirement	Permit No. 199TVP01 Condition Number	How condition was revised
6	Permittee shall notify and obtain approval from the appropriate Service Area Office fifteen days prior to relocation.	32	This condition has been updated to reflect the relocation notification requirements of General Permit #3. The required information on the relocation form from Permit #9521-AA009 has been retained, however the notification period has been extended to 30 days in accordance with AS 46.14.215 and General Permit #3. The requirement to send a copy of the notification form to the Office of the Governor has been relaxed, as this requirement is not found in General Permit #3. However, since this permit contains both GP3 conditions as well as facility specific requirements, the permittee *is* required to notify the appropriate coastal district prior to relocation. This permit cannot waive notification to coastal districts outside of the Aleutians West Coastal Resource Service Area (AWCRSA) as is done in GP3, since this permit has not undergone an Alaska Coastal Management Plan (ACMP) review.
7	Permittee shall notify the department prior to yearly start-up.	23	Same information as previous permit – address updated.
8	The permittee is authorized to release air contaminant emissions associated only with manufacture of asphalt concrete paving material	25.3 and 27.5	This condition has been updated to reflect the requirements of General Permit #3.
9	Permittee shall control sources of fugitive dust.	28	This condition has been updated to reflect the requirements of General Permit #3.
10	Permittee shall maintain a supply of new replacement bags at the facility.	22	Same information as previous permit.

Permit No. 9521-AA009 Condition number	Description of Requirement	Permit No. 199TVP01 Condition Number	How condition was revised
11 & Exhibit C – Part I.	Permittee shall install and operate manometers to measure gas-side pressure gradient across the control device.	24.4b	It is assumed that pressure gauges have been installed on the baghouse control device as required in Condition 11 of Permit 9521-AA009. Condition 24.4b in this permit provides the required monitoring, recordkeeping, and reporting for the baghouse control device.
12 & Exhibit C – Part II.	Source testing requirements	44	Same information as in previous permit, but changed to the format used in General Permit #3. Additional requirements for source testing required in Condition 13 and Exhibit C of Permit #9521-AA009 have been included in condition 44.
13	Permittee shall hourly monitor and record the pressure drop across the baghouse control device.	36.1d, 36.1e	Same information as in previous permit, but the format has been changed to that used in General Permit #3.
14 – 16	Reporting of excess emissions	36.2, 52, 53.1, 53.11, Attachment 6	Revised to reflect current excess emission reporting requirements as found in the standard conditions adopted by reference in 18 AAC 50.346.
17	Access to the facility	9	Revised to reflect the standard condition requirements of 18 AAC 50.345(h), 5/3/02
18 – 20	Periodic reporting and records management	53	Revised to reflect the standard condition requirements of 18 AAC 50.346(b), 5/3/02
Exhibit A	Source Inventory	Section 3	Revised and updated source inventory to reflect current operations. The baghouse control device associated with the asphalt plant is included as it is referenced by permit conditions from the previous AQC permit 9521-AA009. The 1,000 kW diesel engine and fugitive emissions are included in the source inventory as they are 'significant sources'.

Permit No. 9521-AA009 Condition number	Description of Requirement	Permit No. 199TVP01 Condition Number	How condition was revised
Exhibit B	Emission limits, standards, fuel specifications, and operating limits	24 to 27, 41, 45	Same information as in previous permit. The listing of these limitations is redundant with the conditions in the permit and so a separate exhibit is not required in this permit.
Exhibit C	Emissions and process monitoring equipment	24.4b & 44	Same information as in previous permit, but in a different format to clarify the requirements of Exhibit C Parts I and II..
Exhibit D	Air Contaminant Emission Report	36.1d, 36.1e, 53	Conditions 36.1d, 36.1e, and 53, contain the same requirements as found in Permit # 9521-AA009 Exhibit D. Essentially, the requirements of the former "Air Contaminant Emission Report" are met through the reporting requirements of the conditions of this permit.
Exhibit E	Permit application documentation	None	Not required for this permit.
Exhibit F	Portable facility relocation/operation notification	Attachment 2	Same information as in previous permit.

LEGAL AND FACTUAL BASIS FOR THE PERMIT CONDITIONS

Legal Basis: The state and federal regulations for each condition are cited in Operating Permit No.199TVP01.

Conditions 1 - 2, Fee Requirements

Applicability: The regulations require all permits to include due dates for the payment of fees and any method the permittee may use to re-compute assessable emissions.
Factual Basis: These standard conditions require the permittee to pay fees in accordance with the department's billing regulations. The billing regulations set the due dates for payment of fees based on the billing date.

The default assessable emissions are emissions of each air contaminant authorized by the permit (AS 46.14.250(h)(1)(A)). Air contaminant means any regulated air contaminant and any hazardous air contaminant. Therefore, assessable emissions under 18 AAC 50.250(h)(1)(A) means the **potential to emit** any air contaminant identified in the permit, including those not specifically limited by the permit. For example, hydrogen chloride (HCl) emissions from an incinerator are assessable emissions because they are a hazardous air contaminant, even if there is currently no emission limit on HCl for that class of incinerator.

The conditions also describe how the permittee may calculate **actual** annual assessable emissions based on previous actual annual emissions. According to AS 46.14.250(h)(1)(B), assessable emissions are based on each air contaminant. Therefore, fees based on actual emissions must also be paid on any contaminant emitted whether or not the permit contains any limitation of that contaminant.

This standard condition specifies that, unless otherwise approved by the department, calculations of assessable emission based on actual emissions use the most recent previous calendar year's emissions. Since each current year's assessable emission are based on the previous year, the department will not give refunds or make additional billings at the end of the current year if the estimated emissions and current year actual emissions do not match. The permittee will normally pay for actual emissions - just with a one-year time lag. Projected actual emissions may differ from the previous year's actual emissions if there is a change at the facility, such as changes in equipment or an emission rate from existing equipment.

If the permittee does not choose to annually calculate assessable emissions, emissions fees will be based on “potential to emit” (PTE).

The PTE set forth in the condition is based on 0.5% by weight sulfur or fuel gas with a sulfur content of 60 ppm H_2S by volume. If the actual sulfur content of the fuel is greater than these assumptions, the assessable emissions calculations provided by the permittee should reflect the actual sulfur content.

Condition 14, Test Deadline Extension

Applicability: This is a standard condition to be included in all permits. Applies because the permittee is required to conduct source tests by this permit.

Factual Basis: Condition supplements the specific monitoring requirements stated elsewhere in the permit. No additional MR&R is required to ensure compliance with this condition.

Conditions 15 - 18, Test Plans, Notifications & Reports

Applicability: These are standard conditions to be included in all permits. Applies because the permittee is required to conduct source tests by this permit.

Factual Basis: Standard conditions 18 AAC50.345(m) – (o) are incorporated through these conditions. Because these conditions supplement specific monitoring requirements stated elsewhere in the permit, no MR&R is required. The permittee is not required to comply with these conditions when exhaust is observed for visible emissions by smoke readers.

Conditions 19, Good Air Pollution Control Practices

Applicability: These is a standard condition to be included in all permits.

Factual Basis: The condition requires the permittee to comply with good air pollution control practices for all sources. Maintaining and operating equipment in good working order is fundamental to preventing unnecessary or excess emissions. Standard conditions for monitoring compliance with emissions standards are based on the assumption that good maintenance is performed. Without appropriate maintenance, equipment can deteriorate more quickly than with appropriate maintenance. The alternative to appropriate maintenance is more frequent periodic monitoring to ensure that the monitoring results are representative of actual emissions.

Condition 20, Annual Compliance Certification

Applicability: This is a standard condition to be included in all permits. Applies because every permit requires the permittee to submit reports.

Factual Basis: This condition requires the permittee to certify all reports submitted to the department. To ease the certification burden on the permittee, the condition allows the excess emission reports to be **certified** with the facility report, even though it must still be **submitted** more frequently than the facility operating report. This condition supplements the reporting requirements of this permit, therefore no additional monitoring, recordkeeping or reporting is necessary to ensure compliance with this condition.

Condition 21, Owner Requested Operating Limit

Applicability: This condition is an owner requested limit on accordance with 18 AAC 225, to avoid classification as a Prevention of Significant Deterioration Major Facility in the Municipality of Anchorage carbon monoxide non-attainment zone, as found in 18 AAC 50.300(c)(2).

Factual Basis: This condition limits the annual production of hot mix asphalt to no more than 400,000 tons per year. This limit will maintain the facility's potential to emit of carbon monoxide (CO) to below 100 TPY. Since the facility will have a potential to emit of CO

below 100 TPY, it will avoid being classified as a PSD major facility for CO in CO non-attainment zone. Monitoring, recordkeeping, and reporting for this condition is provided through the monitoring and reporting conditions of General Permit #3, as included in this permit. Therefore, by complying with the monitoring and reporting requirements of GP#3, the facility will be able to effectively monitor the quantity of asphalt produced at the facility. An additional reporting requirement, to notify the department within 10 days upon reaching 360,000 tons of asphalt produced, will provide an indicator that the facility may exceed the limit of 400,000 tons of asphalt per year. This 10% margin allows for ample time for the permittee to take measures if necessary to maintain CO levels below 100 TPY.

Condition 22 & 23

Applicability: These conditions have been carried forward from Air Quality Control Permit No. 9521-AA009.

Factual basis: These conditions have been carried forward form the previous AQC Permit No. 9521-AA009 and have been maintained in their original content and format. These requirements appear in the previous operating permit, but are not found in General Permit #3. Since these requirements are specific to the facility, but are not reflected in other permit conditions, they must be present in this permit.

Conditions 3 - 13 and 24 - 55, Statement of Basis for GP3

The department has implemented these conditions from General Permit 3 so that the permittee may receive a facility-specific Title V permit that is similar in language to the GP3 permit. Appendix A contains the Statement of Basis (SOB) for GP3 that explains the GP3 terms and conditions.

APPENDIX A

Asphalt Plant General Permit
Statement of Basis – Conditions 3 - 13, 24 - 55

Prepared by Bill Walker and Carolyn Hudson
Environmental Engineering Associate
9/22/97, revised 1/23/98
Hot Mix Asphalt Plants: SIC Codes 1611 for road paving and 1771 for private residential paving.

Processes and Products

Hot mix asphalt plants makes asphaltic concrete for paving. The product consists of sorted rock aggregate and heated asphaltic cement from either new or recycled materials.

Rock aggregate is sorted by size, heated by direct contact with flame and exhaust gasses in a rotating drum, and mixed with liquid asphalt cement. Mixing of aggregate with liquid asphalt may be either in a separate pug mill, or in the dryer drum. Drum mixers may introduce aggregate in parallel or counterflow to the direction of the exhaust gasses. In parallel flow drum mixers, the asphalt cement is introduced about halfway down the drum. Dust emissions are reduced by contact with the liquid asphalt. In counterflow dryers liquid asphalt is introduced after the aggregate passes the flame. Counterflow units may have organic emissions that are lower than those of parallel flow dryers.

Asphalt may either be loaded directly onto trucks or stored in heated silos.

Emissions from the dryer are controlled by a baghouse and/or venturi scrubber and may use a knockout box or cyclone for primary treatment. Some operators have proposed to use contaminated soils in making asphalt product. The soil remediation requirements have been removed from the final draft at the request of the asphalt plant operators. They have found having both requirements in one permit is confusing. The operators who wish to remediate soil in their asphalt plants must get a soil remediation unit (SRU) operating permit. They may qualify for General Permit 4 (GP-4).

I. SIP and Operating Permit Regulatory Classifications

Asphalt plants are subject to the following classifications.

Category 1 Asphalt Plants (plants constructed, reconstructed, or modified after June 11, 1973 that is subject to a Federal NSPS standard, NSPS Subpart I) and shall be covered by General Permit 2)
18 AAC 50.325(b)(3) and 18 AAC 50.040(a)(2)(I), (NSPS Subpart I adopted by reference); and 18 AAC 50.325(c), 18 AAC 50.300(b)(1)(A), and 18 AAC 50.055(a)(4) and (b)(5).
Because an operating permit is required because of a SIP classification in addition to containing an NSPS source, all emission sources at the facility must be covered by the permit. The only requirements under the NSPS have been incorporated into the regulations (18 AAC 50). The requirements under NSPS Subpart I, include 0.04 grains/dscf and 20% opacity 6-minute average.

Category 2 Asphalt Plants (constructed, reconstructed, or modified before June 11, 1973.)
18 AAC 50.325(c), 18 AAC 50.300(b)(1)(A), and 18 AAC 50.055(a)(1) and (b)(1). These units are not subject to the NSPS Subpart I. Category 2 units are covered under General Permit 3 (GP-3).

Additional Categories
Permits may be needed for facilities in either category through two other authorities. Neither would add any additional requirement on a facility since an operating permit is already required for the whole facility. The additional authorities are:

- 18 AAC 50.325(b)(1) a potential to emit greater than 100 tons per year of a regulated air contaminant,
- 18 AAC 50.325(c) which references 18 AAC 50.300(b)(2), a source with a rated capacity greater than 100 Million Btu/hr,
- 18 AAC 50.325(c) which references 18 AAC 50.300(b)(1)(A) a controlled source with a total rated capacity or equipment throughput greater than 5 tons per hour,
- 18 AAC 50.325(b)(1)(B) a controlled source with a rated capacity greater than 50 Million Btu/hr
- 18 AAC 50.325(b)(3) which references 18 AAC 50.040(a)-(c), equipment subject to a federal emission standard.

A controlled source is a source that needs an air contaminant control unit to comply with an emission standard of 18 AAC 50.050 - 18 AAC 50.060.

II. Qualifying Criteria

Criteria for any asphalt plant

#1 The facility must produce hot mix asphalt.

#2 The facility must have a capacity to process more than 5 tons per hour and has a air pollution control device.

#3 If the facility has a crusher subject to New Source Performance Standards Subpart OOO, they can operate the crushers under this permit.

#4. No facility-specific requirements apply through a construction permit or a permit issued under previous 18 AAC 50.400.

Facility-specific requirements are restrictions on operation which allow the facility to avoid an applicable requirement. Examples are limits on hours of operation or fuel combustion.

Facility-specific requirements do not include permit conditions that are intended to assure compliance with air quality control requirements in regulation. Examples of conditions which are not facility-specific under 18 AAC 50.350 are: a 100 ppm carbon monoxide limit on an afterburner as a good combustion practice; and, keeping dryer temperatures below the

temperature that would cause asphalt cement to smoke. Both of these are permit conditions for preventing emissions which could harm human health or welfare (18 AAC 50.110).

This criterion is basic to the idea of a general permit. Facility specific requirements requested by individual operators cannot be applied to all sources in a category covered by a general permit. A general permit can use identifiable subcategories of facilities. Permit terms can be developed for complying with air quality control requirements applying to all facilities within the subcategory.

#5 Facility limitations in the Sulfur Dioxide Special Protection Area described in 18 AAC 50.025. In order for an asphalt plant to operate in the Special Protection areas, the facility must use fuel that does not exceed 0.075% sulfur by weight, they may not operate in the areas shaded in Section XI of the application and they may not use diesel generators to produce power. Basis: the department modeled two asphalt plants. The department took the worst case scenario from each facility and used worst case winds to determine the facility effect on the area. It was determined that the facility may operate at a low, low sulfur fuel in areas that have 20 ug/m3 of allowable increment in these areas. Areas they did not have the available increment were shaded to indicate that facilities may not operate under the general permit in these areas. The department added the ability to operate under the general permit as a request from asphalt operators during our public comment period.

#6. If a diesel engine(s) with a capacity over 500kW (~650 hp) is used, its stack must be at least 12' high measured from the ground. Screening dispersion modeling predicted that generators with shorter stacks are likely to cause maximum allowable ambient concentrations of SO_2 to be exceeded. Applicant with shorter stack may not use the general permit but must get a facility specific permit and model their ambient air impacts.

General Permit Source Types
The following facilities qualify for the general permit if:
- no facility-specific requirement applies;
- for a facility that has a diesel engines over 500 kW, the general permit can be used only if that engines stack is 12 feet high from the ground or higher.

Regulated Air Contaminants
An asphalt plant will be permitted to emit
- SO_2
- NO_X
- Carbon Monoxide
- Particulate matter
- PM-10, and
- VOCs

Basis for Permit Conditions (This section states the reasons for each permit condition)

Two general permits are being issued for asphalt plants. GP-3 applies to asphalt plants constructed, reconstructed, or modified on or after June 11, 1973. GP-2 applies to plants older than that date. Permit conditions for both permits are identical, except for the numerical value of

the particulate matter emission standard, and the averaging period of the opacity limit. The permit condition numbers referred to below apply to both versions. Monitoring, recordkeeping, and reporting used to support each permit condition are described below. The department considers the supporting data elements described to be the information necessary for an operator to certify compliance.

Standard Permit Conditions

18 AAC 50.345 lists all standard permit conditions that are in the general permit.

24 and 25 Aggregate Dryer or Drum Mixer

24.1 20% Opacity.

This permit condition is the underlying requirement in 18 AAC 50.055(a)(1), or 18 AAC 50.055(a)(4) and 40 C.F.R. 60, Subpart I.

Method 9 readings taken within two days of initial facility startup at a new location, every 30 days of operation at the same location and upon startup after five days of plant shutdown support this condition. These readings are “point in time” compliance indicators indicated by monitoring plan, condition 37. You will notice the department included other operating parameters that when used show that the facility is operating under 20% opacity.

Basis:

The department will use this opportunity to discuss are overall basis for continuous compliance with the visible emissions and particulate standards

There have been many attempts to correlate plume opacity and particulate concentration. The basis for this correlation is Beer-Lambert Law. Method of Halow and Zeek is known as the best available method for calculated plume opacities short of going into Mie calculations. Mie calculations calculate optical density and the equivalent Ringlemann number for a plume when given particle distribution information.

Another study by the EPA characterized plumes as white smoke and black smoke. The black smoke’s correlation between plume transmittance (1/opacity) and particulate was almost perfect agreement. The validity of the agreement can be challenged, nevertheless the agreement illustrates how the transmittance of the plume can be related to the amount of nongaseous material in the plume. From this relationship a 80% transmittance (20% opacity) measuring particulate from direct sampling is 0.052 grains/scf.[10]

Light scattering and absorbing properties of a particle in a flue gas are related to their concentration in the gas. Data obtained from manual particulate traverses (method 5 or 17) can be correlated with transmissometer data. Standards have been prepared that detail both test procedures and methods for developing correlations between Method 5/17 measurements and transmissionmeter data (1/opacity). These ISO standards are 10155 (ISO, 1992) and VDI (1980).

[10] Optical Properties and Visual Effects of Smoke Stack Plumes, EPA, revised 1972.

Opacity and Mass correlations have been related easily using the optical density-extinction expression. Extinction (b) is defined as D/l, the optical density per unit path length.[11] Using the various references a relationship between particulate matter and opacity can be reached. This relationship is used quite extensively in Europe but our legal system in the U.S. has hindered the use of it in this country relaying heavily of pollutant specific Continuous Emission Monitoring Systems (CEMS). CEMS use is merited in some cases, especially large utilities and industries that have the economic and personnel resources to warrant the installation and upkeep of such a system. Asphalt plants (especially in rural Alaska) that run seasonally and intermittently are not candidates for CEMS.

It is because of this fact that the department has looked to alternative monitoring to determine continuous compliance with permit limits. All asphalt plants in Alaska are required to install an air pollution control system (venturi scrubber, baghouse etc.). Air pollution control equipment when operating properly has a 99% removal efficiency. The particulate source test, (an EPA Method 5) required every five years shows the particulate loading and the operating parameters that corresponds to the particulate loading. The facility operators do measure scrubber water flow rate, scrubber gas side pressure drop and baghouse temperature and pressure drop. The department believes if the facility "continuously" maintain these operating parameters as recommended by the manufacturer and as shown during the source test to comply with the particulate limitation then the facility is in compliance with the limit.

The department also believes if the facility is operating at these parameters, the air pollution control equipment is effectively removing particulate so that less than 0.04g/dscf (or 0.05 g/dscf for facilities installed prior to 1973) and the opacity standard is less than 20%. As you can see in Attachment 1, all the source test results have been entered into a spreadsheet. The spreadsheet shows that all asphalt plants have operated below the standard. The average particulate emissions of these plants are 0.0181 g/dscf. Using the 0.052 g/scf to 20% opacity relationship, the department believes that the facilities will be operating at less than 20% opacity while operating the scrubber water flow rate, pressure drop across the scrubber, baghouse temperature and pressure drop across the baghouse within normal operating conditions.

The department asks the owner to monitor Condition 36.1c- maximum feed rate 10% higher than their Method 5 source test which would invalidate the relationship previously discussed. Conditions 36.1e and 36.1f the minimum and maximum differential pressure across the gas side of the scrubber and the minimum water flow rate which must be at least what the flow rate during the source test. Condition 36.2 asks the owner to monitor any deviations from any of the permit conditions. This will show if the operating parameters have not been within the range of the source test or any Method 9 reading showed an exceedance of the 20% opacity limit. Condition 40 asks the operator keep a maintenance log of all preventative maintenance on the air pollution control equipment so that the equipment will be maintained as recommended by the manufacturer and the particulate efficiency and the visible emission standard will be met. Condition 44 is the requirement to submit a source test to show the particulate standard is met and therefore the visible emissions.

[11] Continuous Emission Monitoring by James A. Jahnke,1993 VanNostrand Publishing Inc. ISBN 0-442-00724-8

24.2 0.04 or 0.05 Grains per Dry Standard Cubic Foot
This permit condition is the underlying requirement in 18 AAC 50.055(b)(1), or 18 AAC 50.055(b)(5) and 40 C.F.R. 60, Subpart I. This condition is supported directly by Method 5 source tests every 5 years. This is consistent with current requirements and will show whether the equipment is capable of complying with emission standards for each permit period, if operated properly. Continuous compliance will be shown by operating the parameters discussed in within a range of the values operated during the source test. In addition to the monitoring requirements for conditions 24.1, 24.2 asks for 36.1h and 36.1i, whether the department has requested a Fugitive Dust control plan and/or VOC plan and if plans where requested whether there was any deviations from the plan. Condition 39 asked for all baghouse inspections and bag replacement. Condition 45requests an additional particulate source test for the results of the source test is 0.045 g/dscf (GP-2) or 0.36 g/dscf (GP-3).

24.3 Exemption for submitting a source test
Some facilities do not operate long enough to schedule and perform a source test. The department has exempted these small facilities but they must monitor their dates and hours of operation (36.3) and report (53.9) to the department. These facilities may not operate more than 6 hours in any 24 hour period. In addition, these facilities may not operate more than 30 days per year.

24.4 - 24.5 Baghouse Operation and Maintenance
These conditions are intended to support compliance with opacity and particulate standards by encouraging proper baghouse operation and maintenance.

24.4 Baghouse Inspections
For the baghouse to be an effective control device, the baghouse must be maintained, including replacement of worn out bags. A sudden change in pressure drop across a baghouse may indicate equipment problems, and was considered as a criterion for requiring inspections. But monitoring of pressure drop is not sufficient to indicate when bags should be replaced or other maintenance done. Therefore a baghouse inspection schedule is called for.

The department has asked the facilities to submit an operations and maintenance plan that shows the frequency of inspections, cleanings and preventative maintenance repair or replacement. This plan is required by condition 39 the log is required by condition 38.

The department can see continuous compliance with this condition because records are required for all baghouse inspections.

24.4b Operation the baghouse
After a run is completed, the baghouse temperature will drop through the range where acid gasses will condense. Corrosion will be minimized if the temperature passes through this range as quickly as possible. Therefore this requirement is to maintain temperature in the baghouse as recommended by the source test or manufacturer.

The permittee must maintain appropriate differential pressure across the baghouse. This parameter tells the operator many things including appropriate cleaning cycle, whether any bags are damaged etc. The dp is maintained as recommended by the manufacturer or source test.

24.4c - - 24.5 Inspection before starting up for the season.
Equipment can remain idle for 6 months or more over the winter. Corrosion can occur during that time. This condition is intended to assure that control equipment will be effective when it is needed. These conditions are to be supported by maintenance logs.

25.1 and 27.1 - 500 ppm SO2
This requirement is the underlying requirement in 18 AAC 50.055(c). This permit term assures compliance with the 500 ppm SO_2 requirement. A screening level ambient analysis shows that fuel sulfur levels higher than 0.5% are likely to cause standard or increment violations. On half per cent sulfur is the maximum allowed in diesel or fuel oil #2. Most shipments of #2, and all #1 and similar fuels will contain less. Attachment 1 shows the ppm SO2, from each facility using information from the source test.

25.2 While operating in the Sulfur Dioxide Special Protection Area do not burn fuel oil or used oil with a sulfur content 0.075% Sulfur by weight. This assures that the sensitive area is protected.

25.3 and 27.3 Used oil generated on-site
The department anticipates that the amounts of used oil generated on site are considerably less than what could be burned from off-site sources. If only small amounts are burned at any one time, testing each batch could be unreasonable. EPA guidance has recommended blending used oil 1 part to 3 parts fuel oil to reduce emissions. The department has followed this guidance, but has adapted it to the case of burning used oil with natural gas. For this facility, a ratio of no more than 25% used oil to 75% natural gas is required. The results of at least one test for used oil specifications is to be reported with the semiannual operating report. If the used oil burned at the facility meets the used oil specs, burning it along with 75% natural gas will reduce emissions compared to burning used oil alone.

26 Diesels and insignificant sources – opacity and particulate matter
Conditions 26.1 and 26.2 are the underlying particulate and opacity requirements of 18 AAC 50.055(a)(1) and (b)(1).

Monitoring, recordkeeping and reporting are not required under Alaska regulations for insignificant sources.

The department does not find it reasonable to stipulate Method 5 testing for diesel generators at asphalt plants. Source testing vendors have indicated the difficulty of performing Method 5 on internal combustion engines. Control options are limited for diesels, the method for monitoring compliance with the particulate matter standard is through logs to show proper maintenance. Monitoring Condition 40 asked to keep a maintenance log and to follow manufacturer's recommended preventative maintenance.

It is reasonable to show compliance with the opacity limit by performing a smoke/no smoke reading for 30 consecutive operating days. If no smoke is seen during the 30 day period then the

permittee shall continue the smoke/no smoke inspection on a monthly basis. If smoke is seen during the 30 day period the permittee may do maintenance or change operation to emit “no smoke” and retest within 72 hours or do a Method 9 reading within 10 days of the date the “smoke” was initially seen. This will show the “normal” operation of the unit. The 30 day inspection will indicate if engine deterioration has occurred and is affecting visible emissions.

To ensure a representative test the department requires the permittee to perform smoke/no smoke inspections at the highest load for that engine or combustion unit expected for the month. If this is not practicable or the test is less than 80% of design load, the permittee will attach an explanation.

If the permittee performs a Method 9 reading and the reading is below 12%, the department feels that this is conservatively below the opacity standard of 20% and does not exceed the particulate matter standard (20% correlating to 0.052 g/scf as presented in 24.1 and 24.2. The facility may continue to operate doing Method 9 readings for three consecutive operating days and then once a month. If a method 9 reading shows that the opacity is above 12%, in addition to the Method 9 readings described above, the facility must perform a Method 5 or other EPA approved method source test showing than the particulate emissions are less than 0.05 g/dscf. This test must occur within 30 days of the Method 9 reading. The permittee shall take Method 9 readings during the particulate matter tests in order to calculate an average opacity that corresponds to the particulate matter emissions. The permittee shall submit the test results to the department within 30 days of the testing completion.

28 Dust
Condition 28.1 lists sources of fugitive dust at an asphalt plant. The requirement for reasonable precautions is the underlying requirement in 18 AAC 50.045(d). If a particular asphalt plant has problems with releases of fugitive dust, Condition 15.2 allows the department to require a facility specific plan to remedy the situation, and allows the facility to continue to operate under the general permit. Reasonable precautions are defined in the permit

28.2 Operation and Maintenance Procedures
Proper operation and maintenance of all equipment is essential to minimizing emissions.

Maintenance logs support this condition. Only preventative maintenance specified by the manufacturer need be entered. The department wants to keep the scope of recordkeeping adequate, but not require unnecessary details.

30 Air pollution Prohibited

The operator must maintain a log of all facility complaints received regarding air emissions. The facility will report the contents of the log.

32 Location
AS 46.14.215 says that the operator must notify the department at least 30 days before moving. Due to the unpredictability of construction, this condition may not be met. The department

requires the facility to give 30 days notice a tentative schedule and to follow up with the exact date before the equipment startup by letter, fax, phone, or e-mail.

33 Emission fees

Condition 33.2 says to pay emission fees in accordance with Attachment 4 of the permit. The permit and application specifies the amount of emission fees owed, depending on annual fuel consumption for a diesel, and on production rates, for other equipment at the asphalt plant. Condition 33.1 asks for the necessary fuel consumption data. Production rates information will already be available under other permit conditions.

34 Equipment subject to Subpart OOO

40 C.F.R. 60, Subpart OOO applies to equipment used to crush or grind non-metallic minerals. The department has included this equipment in order for facilities to operate under one permit. Most asphalt plants have a crusher, although they are not necessarily operated at the same location. Condition 34 covers emission points without mechanical induced flow. Equipment that collects emissions and exhausts them through a mechanically induced draft stack are not eligible to use a general permit.
Most facilities in Alaska do not have scrubbers or exhaust into a stack that are induced by an ID fan so Condition 34 will be the most applicable condition for facilities in Alaska.

Condition 34 does not have a particulate standard because the exhaust from this equipment is not collected and exhausted through an exhaust stack.

The following conditions reference the federal standards
21 A.a - 40 CFR 60.672(c) particulate standard using opacity 40 CFR 60.672(b)
21 A.b - 40 CFR 60.672(b) particulate standard using opacity 40 CFR 60.672(c)
21 B. 40 CFR 60.675(b)(2) and 40 CFR 60.675(d)
21.C includes reporting requirements mandated by 40 CFR 60.676
Notification is required in 60.676(a)(1)-(4).

Truck dumping into screening operations, feed hoppers or crushers are exempt from the above provisions as stated in 10 CFR 60.672(e)

Please note the permit asks for semi annual reporting that reflects the operator's schedules instead of EPA mandated reporting as stated in 60.676(e). Instead of reporting July 30 and January 30, the operators who like to report once a year on January 30. Ideally we would like to have only annual reporting. We have proposed the operators report 30 days after the close of the third and first quarter. This deviates from the Subpart OOO so we ask the EPA approve an alternative reporting scenario.

35 Subpart Kb storage tanks

Most Asphalt plants use diesel fuel oil. Some stationary facility's storage tanks may be an affected facility under NSPS Subpart Kb. Since diesel fuel is not stored under pressure the only

requirements of Subpart Kb applicable is to keep accessible records showing the dimensions of each storage vessel, its capacity and the calculations for computing capacity.

Requirements not covered by the General Permit

40 C.F.R. 60, Subpart UUU applies to calciminers and dryers in mineral industries. An asphalt plant drum is not a calciminer because it is used to release material that is physically not chemically bound. It is a dryer when used to make asphalt, but it is not used to produce industrial sand or light aggregate. If an asphalt plant is used to make sand or light aggregate for commercial use other to include in asphalt concrete, then this general permit may not be used. The operator must apply for a facility specific permit under 18 AAC 50.335.

40 C.F.R. 63, Subpart DD applies to hazardous waste treatment facilities. This subpart does not apply to an asphalt plant treating contaminated soils under this permit. To be subject to Subpart DD:

- The facility would have to be a major source of hazardous air contaminants; and
- The facility would have to:
- treat hazardous waste;
- treat wastewater which is an offsite material;
- recycle or reprocess used solvent; or
- recycle or reprocess used oil.
- An asphalt plant treating contaminated soils would not also treat offsite-generated wastewater under this permit. It would incinerate organic compounds rather than recycling or reprocessing them. Treatment of hazardous waste, used oil, or used solvents are prohibited under the permit.

Attachment #1

ATTACHMENT 1

	Date of Stack test	PM-10 g/dscf	PM-10 lbs/hr	Fuel S Content	density	fuel feed Rate gal/m	fuel feed rate gal/hr	exhaust scfm	Temp F	SO2 ppm
Earthmovers				0.50%	7.1	150	2.5	15,952	150	67.98677
Wilder Construction				0.50%	7.1	280	4.667	34,500	150	58.67961
Wilder Construction				0.50%	7.1	90	1.5	15,952	150	40.79206
Wel-Aska Co./Barber G	Jul-94	0.007	0.71	0.50%	7.1	300	5	13,050		166.2107
Summit CMI	Jun-94	0.0097	1.05	0.50%	7.1	700	11.6667	12,629		400.7578
Quality Asphalt AEDCO	Jul-94	0.0043	0.56	0.50%	7.1	150	2.5	15,194		71.37945
Secon	Sep-94	0.004	0.79	0.50%	7.1	360	6	23,042		112.9632
Earthmovers AESCO	Sep-89	0.009	1.13	0.50%	7.1	150	2.5	15,590	155	69.56543
Emulsion Prod. Todd	Jul-89	0.02	1.95	0.50%	7.1	180	3	11,646	102	111.7491
Fosco-CMI Asphalt	May-94	0.023	2.65	0.50%	7.1	700	11.667	13,263		381.5967
R&Babler-Stansteel	Sep-87	0.032	4.65	0.50%	7.1	510	8.5	17,001	302	216.8922
M-B-WAG	Jun-93	0.029	7.21	0.50%	7.1	700	11.667	29,237	218	173.1066
Quality Asphalt .-CMI	Jun-94	0.0095	2.31	0.50%	7.1	525	8.75	28,368	-	133.805
Quality Asphalt Astec	Jun-94	0.024	5.04	0.50%	7.1	525	8.75	24,500	-	154.9321
Quality Asphalt Pav.	Jul-91	0.0366	3.18	0.50%	7.1	150	2.5	10,137	-	106.9909
South Coast-AESCO	Sep-92	0.026	5.08	0.50%	7.1	100	1.6667	21,572	160	33.51675
Summit –Stansteel	Sep-90	0.0042	0.4	0.50%	7.1	510	8.5	11,111	-	331.8647
Tagish-ioneer	Nov-93	0.032	5.1	0.50%	7.1	300	5	18,875	147	114.9147
Wilder-Barber-Green	Jul-94	0.006	1.02	0.50%	7.1	90	1.5	19,833	-	32.80916
Wilder-Pioneer	Sep-87	0.012	2.82	0.50%	7.1	280	4.6667	27,235	-	74.33254
Wilson-AEDC	Oct-86	0.038	0	0.50%	7.1	150	2.5	15,000	163	72.30167

Average 0.0181